

# BUSINESS WEEK

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Business Be  
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Noma Lites' Joseph H. Ward: You ship in August, they pay in December (page 41)

A MCGRAW-HILL PUBLICATION

DEC. 19, 1953



## **What have they all in common?**

Explosives or toothpaste, paint, sausage casings, and printer's ink — *all* need glycerine, everything in the picture is *improved* by glycerine.

Until a few years ago, it was difficult to obtain enough glycerine for many industrial processes. Then in 1948, Shell Chemical produced pure glycerine in commercial quantities using a new, dependable source of raw material—petroleum. It wasn't long before the serious need in the economy was filled. Today, Shell Chemical accounts for more than one-quarter of the nation's glycerine supply, and current plant expansion will lift output another 25 million pounds yearly.

Providing a stable *domestic* source of pure glycerine is another example of Shell Chemical's partnership with industry and agriculture. Making petroleum chemistry serve your needs is our constant purpose.

ABCDEE  
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12345678

# Shell Chemical Corporation

Chemical Partner of Industry and Agriculture  
NEW YORK • SAN FRANCISCO





When did  
your telephone  
last need fixing?

Bet you'll say, "Can't remember"—or, "Years ago."

Truth is, the rugged telephone instrument itself doesn't need fixing oftener than once in about 9 years. Even when you add in *all* the complex things—relays, vacuum tubes, switches, wire, cable—which make Bell telephones work, service interruptions average only one in two years and two months.

With all the chances for breakdown, how come your telephone is so reliable?

Part of the answer is: every wire, every piece, every part is made by Western Electric with the idea of long life and as little maintenance as possible. This helps your Bell telephone company give you the most dependable service at the lowest possible cost... a goal we share because we're a part of the Bell System.



A UNIT OF THE BELL SYSTEM SINCE 1882

# BIG SCOREBOARD

for Scores of Manufacturing Processes



Added Evidence  
that —

## Everyone Can Count on VEEDER-ROOT

This husky long-lived Box-type Counter is available with 6 figures, in either the ratchet model, or in the new geared model with bearing inserts. This new gearing permits speeds of 1,000 counts per minute, which makes the counter adaptable to practically any manufacturing process where large figures are wanted for

easy reading at a distance. Figure out how this counter can be *built into* your product as a new sales advantage over competition. Write:

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BUSINESS WEEK • Dec. 19, 1953

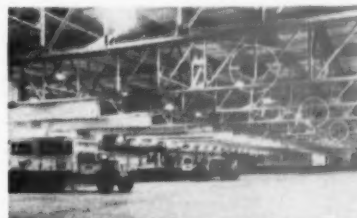


Aerial view of all-new bakery and warehouse of American Stores Company, Philadelphia. Engineers and Architects: Ganteaume & McMullen, Boston. General Contractor: Hughes-Foulkrod Company, Philadelphia. Heating Contractor: W. M. Anderson Company, Philadelphia.

## HEATING A BAKERY-AND-WAREHOUSE GIANT

Steam at 125 lbs. pressure serves dual purpose in mammoth new bakery and warehouse: Supplies needs of bakery equipment and heats vast area through 200 Webster-Nesbitt Unit Heaters.

In designing the heating system for this American Stores Company bakery and warehouse in Philadelphia, Ganteaume & McMullen, Boston specialists in bakery construction, chose high pressure steam. This permitted worthwhile savings in size of unit heaters and piping.



Webster-Nesbitt Little Giant Down-Blow Units (circled) spot heat throughout high-ceilinged truck-loading area.

Low temperature coils in Webster-Nesbitt Unit Heaters reduce temperature of discharged air so that it reaches the floor from heights of 20 to 25 feet. Heat is spotted where it is wanted, delivered in the required volume when it is wanted. Heated air is mixed thoroughly with room air . . . reduces temperature-stratification and overheating in upper areas . . . assures quick heating, low fuel cost, greater comfort.

If you plan new construction or heating modernization, call the nearest Webster Representative, or write us for his name.

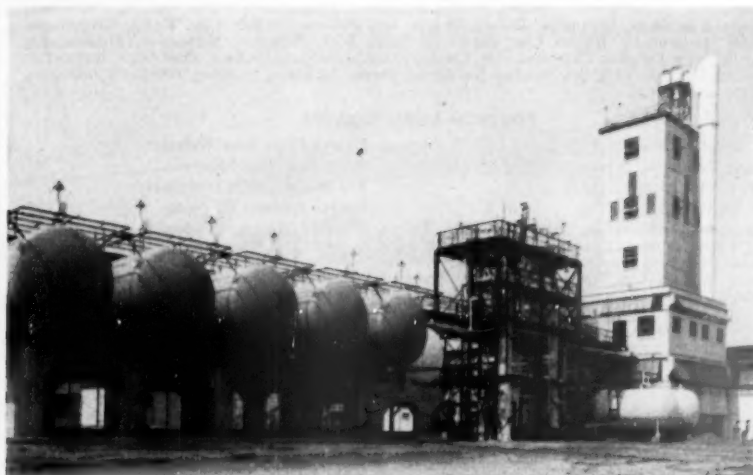
Address Dept. BW-12

**WARREN WEBSTER & CO.**  
 Camden 5, N.J. Representatives in Principal Cities  
 In Canada, Darling Brothers, Limited, Montreal

**Webster**  
**HEATING**

*Chemicals you live by*

# A great source



*Investment in instruments, high in all chemical plants, is twice the average in this new DIAMOND plant. Over 400 controlling, indicating and recording devices guard the quality of DIAMOND PVC.*

# New of PVC

If you use polyvinyl chloride, either as a processor of resin, or as a user of any of the thousands of end products, you now have the advantages and protection of a great, new source of supply.

DIAMOND ALKALI has completed, at Houston, Texas, the world's most modern, most advanced plant for the production of PVC resins. All of the production of this plant will be available to plastics processors.

As a safeguard to uniform quality and uninterrupted supply, every production step, from raw materials to resin, is integrated at this one plant and is under the continuous control of DIAMOND engineers.

In addition, plastics processors will have the assurance of high quality and prompt delivery associated with all DIAMOND products and the cooperation of an experienced technical staff equipped with complete research, test and product development facilities.

DIAMOND PVC will be produced in new and improved formulas as they are developed under DIAMOND's continuing research programs.

For information on DIAMOND PVC and the cooperation of the DIAMOND Technical Staff, write to DIAMOND ALKALI COMPANY, 300 Union Commerce Building, Cleveland 14, Ohio.

**DIAMOND ALKALI COMPANY**  
CLEVELAND 14, OHIO



# CROWN ~~SPRA-TAINER~~

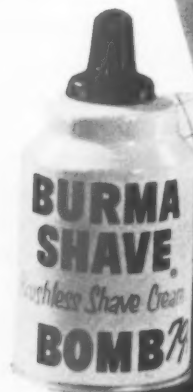
# SWEEPS



The names read like

**"Who's Who In Shaving Creams."**

**These are Crown customers,  
we're proud to say.**



Also 12-oz.  
Professional  
Size



Also 6-oz. Size\*



Also 6-oz. Size\*



# Pressurized Shave Cream Field

Also  
Menthol-Iced  
Foam Shave\*



## SPRA-TAINER Does It Again!

SPRA-TAINER was born to leadership. Historically, it was the world's first lightweight pressurized container. Now it's "First Choice" with manufacturers in one industry after another.

"No Top Seam, No Side Seam" construction provides surest product protection. Exclusive "Modern Design" commands the most attention, hence sells the most merchandise.

x SPRA-TAINER is but one member of Crown's distinguished family of finest quality cans. Our complete line offers progressive packaging to the many and diverse products of American industry. May we tell you about it in person? Just call or write.

## CROWN CAN

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*One of America's Largest Can Manufacturers*

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You profit through extra savings when you specify Belden Electrical Cords.

Trained operators and special equipment build Belden complete cords to the exact specifications of your product.

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MANUFACTURERS WHOSE PRODUCTS SERVE BEST

*Specify* **Belden**  
WIREMAKER FOR INDUSTRY

## READERS REPORT

### Whitewash Won't Wash

Dear Sir:

I strongly subscribe to BW in general, but I cannot go along with your report [BW—Nov.21'53,p116], where the truckers have tried to whitewash themselves.

Anyone who drives today is well aware of the road-hog tactics practiced by a large number of truck drivers. The main reason that they avoid more accidents is that the car driver yields the road. . . . One can often see 20 to 30 cars behind a truck traveling at about 10 mph. up a hill. On passing the top they [trucks] . . . often greatly exceed the state speed limit. Diesels release a lot of smoke and bad odors . . . operate without mufflers, making a lot of noise. They wear out our roads more than all other travel.

It is no longer a pleasure to "live in a house by the side of the road and be a friend to man." The trucks have taken over, and a large number have become a nuisance.

WALTER CRUTCHFIELD  
HENDERSONVILLE, N. C.

### Wrong Job, Right Man

Dear Sir:

I appreciate very much your article on our committee [BW—Oct.24'53, p150]. . . . Our policy has been spelled out a little more fully in a supplemental statement submitted to the Randall Commission this week.

However, I hope you won't mind my calling your attention to the fact that . . . I am a lawyer, not an investment banker, and a partner in the law firm of Headley, Sibbald and Taft, of Cincinnati, Ohio.

CHARLES P. TAFT

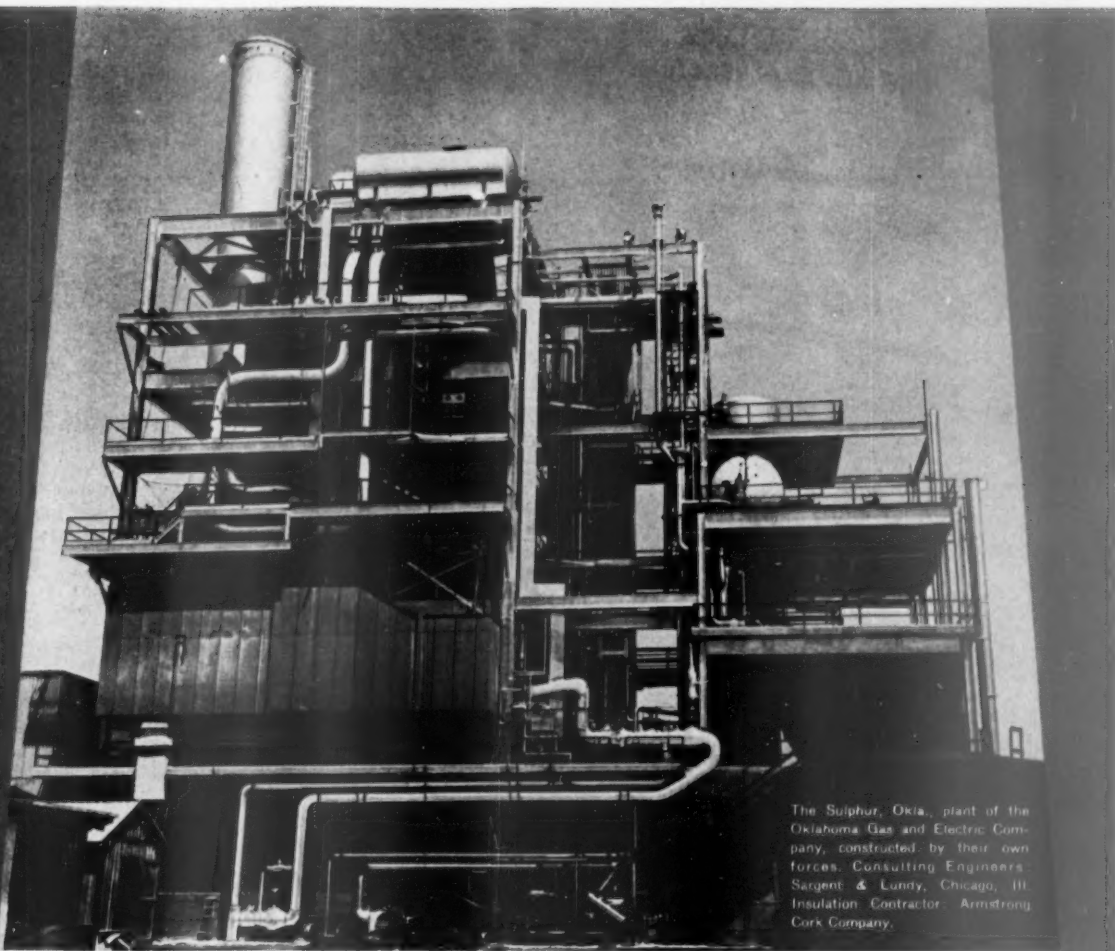
PRESIDENT  
COMMITTEE FOR A NATIONAL  
TRADE POLICY, INC.  
CINCINNATI, OHIO

### Unemployment Benefits

Dear Sir:

Your feature Washington Outlook [BW—Oct.31'53,p37] states that "Higher unemployment compensation may get through Congress next year." I would like to . . . correct what may be the impression that Congress determines unemployment compensation benefits.

Under the federal-state arrangement for handling unemployment compensation, the benefit amount and the duration of benefits are left entirely to the discretion of the individual states. . . . The federal role deals, in part, with collecting the revenue to be used by



The Sulphur, Okla., plant of the Oklahoma Gas and Electric Company, constructed by their own forces. Consulting Engineers: Sargent & Lundy, Chicago, Ill. Insulation Contractor: Armstrong Cork Company.

They chose "*Featherweight*"<sup>®</sup> 85% MAGNESIA  
TO INSULATE HEATERS, EVAPORATORS & STORAGE TANKS

To make their Sulphur, Okla., plant as modern and efficient as possible, Oklahoma Gas and Electric Company sought a modern, efficient insulation material. They found it in "Featherweight" 85% Magnesia, and used it extensively throughout the plant to insulate heaters, evaporators, storage tanks, and other equipment.

"Featherweight" 85% Magnesia is effective where temperatures do not exceed 600° F. Used in combination with K&M Hy-Temp Insulation (diatomaceous silica) its range is extended to 1900° F.

Hy-Temp is applied directly to the hot surface, and "Featherweight" is used as the second

layer. The two layers are fitted with staggered vertical and horizontal joints—thus eliminating heat loss which occurs on single layer installations when the expansion of hot piping and equipment causes joints to open.

This K&M combination insulation will last the life of the equipment it serves, will withstand moisture, vibration, alternate heating and cooling, wetting and drying. Both materials are supplied in a variety of forms and thicknesses.

Your K&M distributor is an experienced applicator who will gladly give you more information about these heat-saving, money-saving K&M insulations. Or write directly to us.

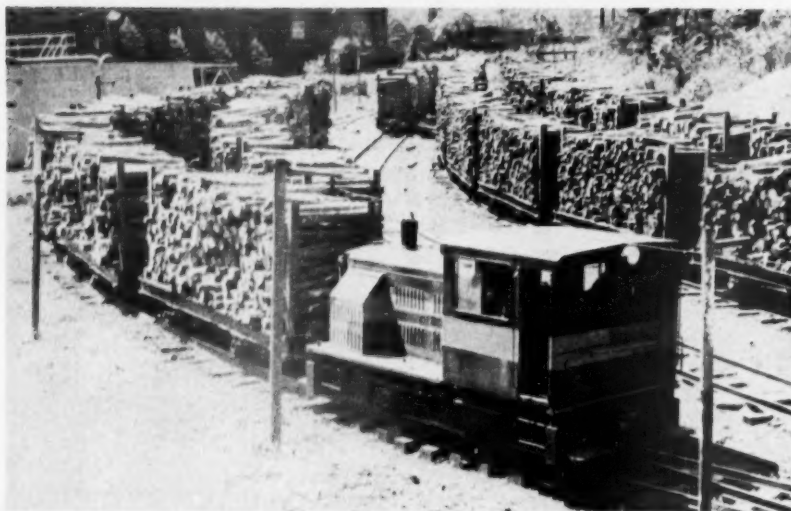
Nature made asbestos . . .  
Keasbey & Mattison has made it  
serve mankind since 1873

**KEASBEY & MATTISON**  
COMPANY • AMBLER • PENNSYLVANIA

In Canada: Atlas Asbestos Co., Ltd., Montreal, Toronto, Winnipeg, Vancouver



# POWERFUL PULLER



**saves almost \$6,000.00 a year  
for large eastern paper mill\***

That's right, just under \$6,000.00 per year in savings since their 18 Ton Plymouth Diesel with Torqomotive Drive was placed in operation spotting and hauling carloads of pulpwood from the wood yard to the chipper.

Purchased in 1950 to replace 3 electric trolley locomotives, this Plymouth averages over 200 hours operation each month using only 5 gallons of fuel per day. While low fuel and maintenance costs contribute a good share of the savings, the balance is saved by the elimination of broken and damaged couplers formerly caused by rough starts and coupling shocks.

This is made possible by the smoothness of Plymouth's Torqomotive Drive and Plymouth's precision controls. Operators like Torqomotive Drive for its ease of operation which enables them to maintain peak efficiency over the full shift.

Smooth out your own switching and hauling problems and save money, too! Write today for information on Plymouth Locomotives. Models from 3 to 70 tons with your choice of gasoline or Diesel power, mechanical or Torqomotive Drive. Also Diesel-Electric.

\*Name furnished on request.

**PLYMOUTH  
TORQOMOTIVE  
LOCOMOTIVES**

PLYMOUTH LOCOMOTIVE WORKS, 333 BELL ST., PLYMOUTH, OHIO

the states in the cost of administering their unemployment compensation laws. Congress each year makes appropriations to provide for the administration of state laws but does not pass on the amount or duration of benefits.

Of course, state legislatures are always concerned with maintaining benefits at proper levels consistent with the objectives of unemployment compensation. In fact, during the past legislative session, 20 states raised the maximum benefit amount by from \$1 to \$6, while eight states increased the weekly minimum amount. Ten states also increased their duration provisions.

I hope this serves to clarify the point that under existing law the individual states have the right to determine unemployment compensation benefits—not Congress.

RUSSELL HUBBARD, JR.  
MANAGER—STATUTORY BENEFITS  
EMPLOYEE BENEFITS SERVICES DEPT.  
GENERAL ELECTRIC CO.  
NEW YORK, N. Y.

## Attorneys' Choice

Dear Sir:

In the Nov. 28 issue of BUSINESS WEEK, on page 28 . . . you mention that doctors, who oppose inclusion under any amendment to the Social Security Act, as self-employed personnel, are most likely to be left out, and possibly self-employed farmers. I am a self-employed attorney, and I am strenuously opposed to being included under any self-employment amendment to the Social Security Act as it now exists, and I believe that there are many other attorneys who feel the same way. . . .

I do not object to a provision which would permit attorneys who desire coverage to contribute as self-employed individuals, but I feel that it is unfair for people who must make their own living from a profession to be required to come under the Social Security Act.

If the Administration wishes to help the self-employed professional man, it can do so much more efficiently by passing the Reed-Keogh Bill, which would permit the professional man to set aside a portion of his pre-tax earnings each year to provide for his own retirement. It is this measure which I and many other attorneys wish to see enacted into law.

WILLIAM D. LOUCKS, JR.  
LOUCKS, CULLEN & LOUCKS  
NEW YORK, N. Y.

## Internal Disorder

Dear Sir:

On page 171 of the Dec. 5 issue of BUSINESS WEEK you said that "In effect, a whole new International Revenue Code is in the works."

Of course you should have said



## Are they using up supplies like crazy in *your* shop?

It drives management daffy if Production runs short of materials or somebody goes overboard over-buying.

At Eastman Cotton Mills in Eastman, Georgia, modern controls have taken the bugs out of supply inventory.

McBee Keysort cards serve Eastman as requisition orders, keeping tight rein on parts stored in their supply bins. Processed in the main office, the Keysort cards are quickly sorted by department, shift and supply bin. A clerk summarizes requisitions to the stock record, providing running balances on all stock.

Thanks to Keysort, Eastman has a perpetual inventory of supplies in stock . . . without having to employ extra personnel or install special equipment.

Closer control of supplies gives Eastman overseers a better idea of worker efficiency. If a loomfixer's supply costs are abnormally low, he can't be keeping looms in top operating condition. If his costs are excessive, he's probably wasting supplies.

Inventory control is only one way Keysort aids business, providing positive records at the lowest cost.

There's a McBee representative near you. Ask his advice on your own record-keeping problem. Or mail coupon.

## THE McBEE COMPANY

Sole Manufacturer of Keysort—The Marginally Punched Card

### MAIL THIS COUPON TODAY

BW-12-19-53

The McBee Company • 295 Madison Ave., New York 17, N.Y.

We're interested in knowing how **KEYSORT** can improve

our ☐ MATERIAL COSTING AND INVENTORY CONTROL ☐ ORDER ANALYSIS  
☐ PRODUCTION CONTROL ☐ PAYROLL AND LABOR COSTING ☐

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ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_

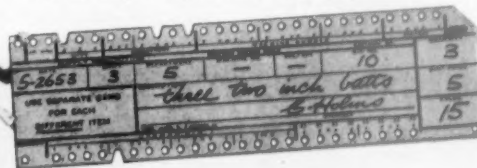
ZONE \_\_\_\_\_ STATE \_\_\_\_\_

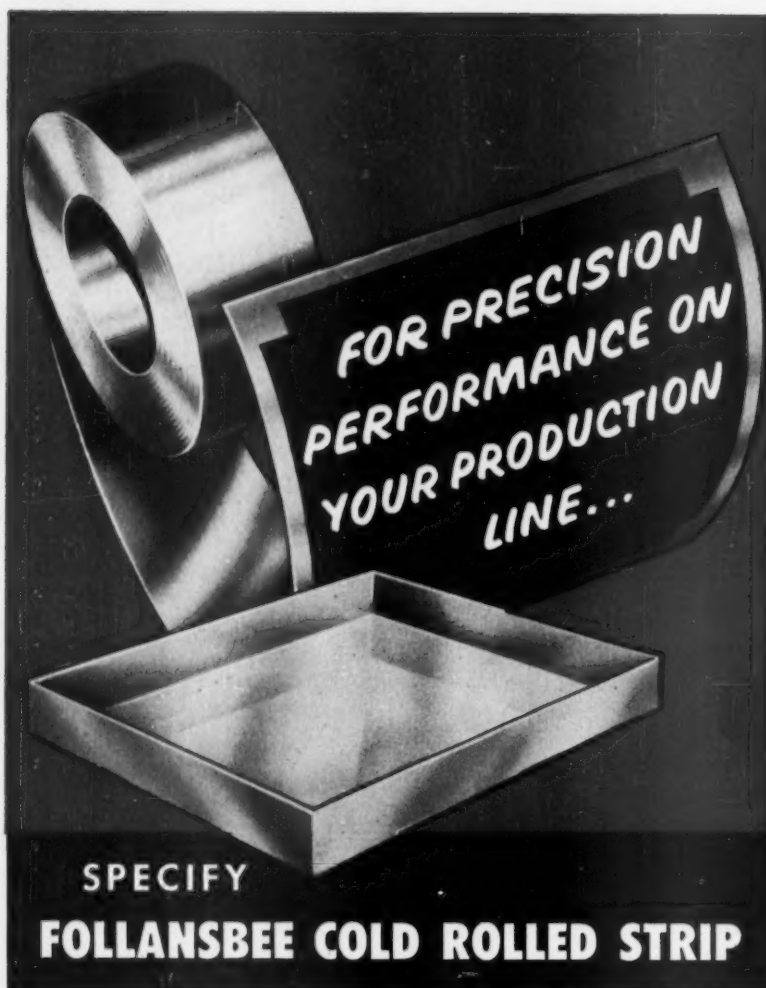
BY \_\_\_\_\_ NO. OF EMPLOYEES \_\_\_\_\_



295 Madison Avenue, New York 17, N. Y.

Offices in principal cities. The McBee Company, Ltd.,  
 11 Bermondsey Road, Toronto 13, Ontario.





**FOR PRECISION  
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**SPECIFY  
FOLLANSBEE COLD ROLLED STRIP**

Leading manufacturers of precision parts are using Follansbee Cold Rolled Strip in coils for all types of stamped and formed products.

The finish, temper and uniform tolerance of Follansbee Cold Rolled Strip make it a highly desirable steel for precision jobs on your presses. Follansbee coils can be supplied with I.D. and O.D. for any production set-up.

Follansbee can give you warehouse type service from the mill—providing a continuous supply of custom-quality Cold Rolled Strip Steel from coils to your presses, regardless of forming operations involved.

The Follansbee Steel Representative nearest you will give you full information. It will pay you to discuss your fabricating problems with him today.

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Cold Rolled Strip      Seamless Tube and Coiling  
Pillared Box Sheets and Coils

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**FOLLANSBEE METAL WAREHOUSES**

Pittsburgh, Pa.      Rochester, N.Y.      Ashland, Ohio



"Internal Revenue Code" but nevertheless you inadvertently suggested what could be a solution to the federal government's perpetual deficit problem.

K. L. WANDKE

ST. PAUL, MINN.

• Sorry. This was a typographical error.

## Pasadena Shows How

Dear Sir:

Re your article entitled Wanted: a Lot More Parking Space [BW—Nov. 14 '53, p186], it seems that parking is like personal conduct, it requires moral courage to do the things necessary to solve the problem. . . .

We in Pasadena . . . are thankful that the citizens and the city council have moral courage.

Three times the parking meter racket assaulted this city . . . but each time the citizens voted down the proposal. Finally, the city council in 1948 adopted an ordinance making it mandatory that all apartment houses, industrial and commercial buildings provide off-street parking for tenants and patrons.

It works.

First, there was a great hue and cry that there was no space available. But surveys showed that even in the most crowded areas the back-lots of store buildings could often be paved and handle three or four cars.

Now, Pasadena, with free streets and carefully regulated parking limits, is getting bigger, better stores than other communities and its once-dying central business area is picking up. . . .

We believe that there is a better sense of observance of laws too. Here people are guests on our streets—not renters.

ELLSWORTH A. SYLVESTER  
SYLVESTER ADVERTISING AGENCY  
PASADENA  
LOS ANGELES, CALIF.

## So There!

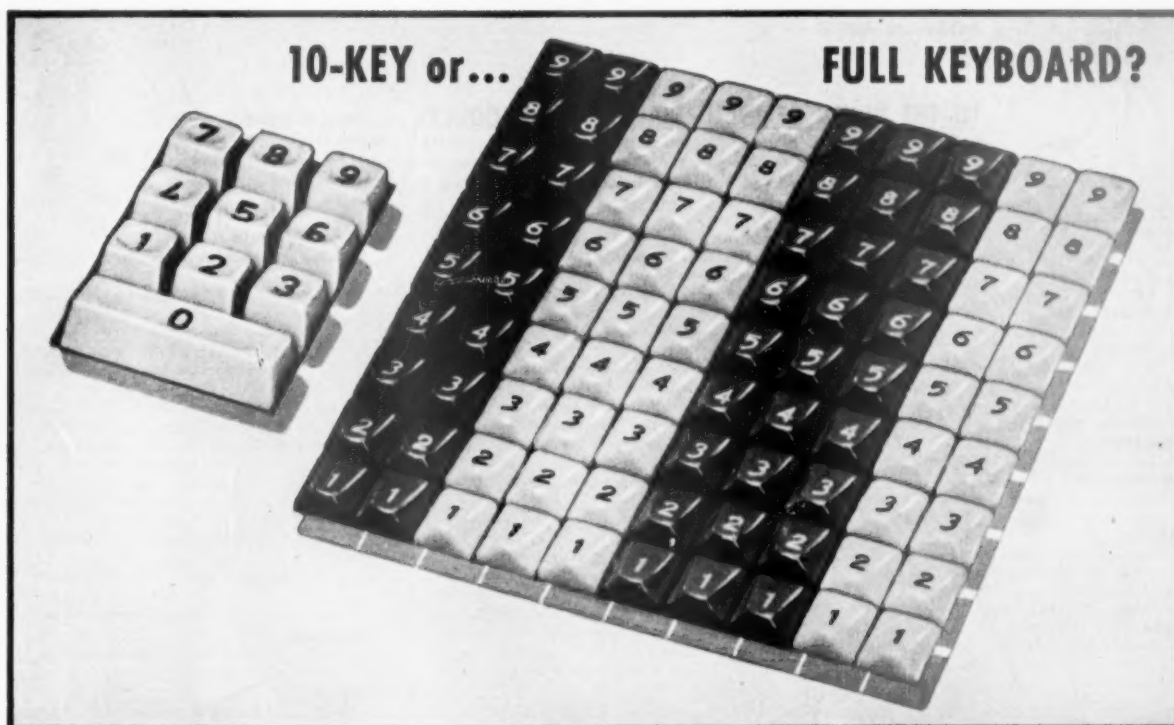
Dear Sir:

In New Products Briefs [BW—Oct. 31 '53, p95], you announced that "a postage meter, not much larger than a dial telephone, is being introduced by Pitney-Bowes, Inc. . . ."

We have been the user of one of these meters for 11 months.

J. W. ROSENBERGER  
NEW MARKET DEPARTMENT STORE  
NEW MARKET, VA.

Letters should be addressed to Readers Report Editor, BUSINESS WEEK, 330 West 42nd Street, New York 36, N. Y.



## How to pick the Adding Machine that's right for you!

Full keyboard or 10-key? Businessmen differ, and with good reason . . . there's no simple answer. The type for you is the one exactly suited to your work and your business. Monroe has both! So the one person to give you intelligent, honest,

and unprejudiced help in making your selection is the Man from Monroe. For the key to this or any figuring problem lies not only in the unequalled breadth and excellence of his line of machines but in the skill and experience he offers,

*For instance, has anyone else ever based his recommendation on your figure work rather than his machine? Well, here are a few . . . but only a few . . . of the guides the Man from Monroe might suggest:*

### A 10-KEY USUALLY DOES THE JOB BETTER:



1. When figures of more than five digits are involved;
2. When numbers are being called orally by another person;
3. When figures must be taken from separate sheets of paper.

### A FULL KEYBOARD USUALLY DOES THE JOB BETTER:

1. When digits can be sighted easily at a glance (the telephone company says that's five);
2. When you want to train beginners faster;
3. When figures follow a pattern that can best utilize Monroe's "Rhythm-add" System.



**MONROE CALCULATING • ADDING • ACCOUNTING MACHINES**  
 Monroe Calculating Machine Company, Inc., General Offices: Orange, New Jersey



## THE BOSTON MAN IN 1953

**TO THE BUYER OF INDUSTRIAL RUBBER PRODUCTS . . .** Here is a handy, easy-to-file list of some of the many Boston Men throughout the country . . . production experts specializing in industrial rubber products. With this list on file, you can quickly and easily locate a Boston distributor near you . . . and put his industrial rubber experience and know-how to work for you.

### ALABAMA

Mill & Textile Supply Co., Birmingham

### ARKANSAS

Little Rock Road Machinery Co., Little Rock

### CALIFORNIA

Warren & Bailey Company, Los Angeles  
Mission Pipe and Supply Co., San Diego  
L. P. Degen Belting Company, San Francisco  
Gilmore Steel & Supply Co., San Francisco

### COLORADO

Johnson Supply Co., Denver

### CONNECTICUT

The Bidwell Rubber Company, Hartford  
W. I. Clark Company, New Haven

### FLORIDA

Farquhar Machinery Company, Jacksonville  
Central Machinery & Supply Co., Miami  
Mill Supplies Inc., Orlando  
Knight & Wall Company, Tampa

### GEORGIA

Boykin Tool & Supply Company, Atlanta  
Toole Supply Co., Inc., Augusta  
Corbin Supply Company, Macon  
Fleming & Moore Supply Co., Savannah

### ILLINOIS

Simmons Supply Company, Cairo  
Boston Woven Hose & Rubber Co. of  
Pittsburgh, Chicago Division, Chicago  
Barrett Hardware Co., Joliet  
Couch & Heyle, Inc., Peoria  
Factory Supplies Co., Rockford  
W. M. Hales Co., Inc., West Frankfort

### INDIANA

Hough Industrial Supplies, Inc., Evansville  
National Mill Supply, Inc., Fort Wayne  
W. J. Holliday & Company, Indianapolis  
Biggs Pump & Supply, Inc., Lafayette  
Industrial Supply Company, Terre Haute

### IOWA

W. C. Brown Supply Company, Fort Dodge

### KANSAS

Joplin Supply Company, Baxter Springs  
Supply Service Company, Hutchinson  
Phillips & Easton Supply Co., Wichita

### KENTUCKY

Industrial Division, Womwell Automotive  
Parts Company, Lexington  
Davis Rubber & Supply Company, Louisville  
Ohio Valley Supply Company, Paducah

### LOUISIANA

Woodward, Wight & Co., Ltd., New Orleans  
Midland Belting and Supply Co., Shreveport

### MAINE

W. I. Blake & Co., Portland

### MARYLAND

Free State Equipment Co., Inc., Baltimore  
Kauffman Manufacturing & Supply Co.,  
Hagerstown

### MASSACHUSETTS

Hedge Matthews Company, Boston  
Hinds & Coan Co., Boston  
The Greene Rubber Company, Cambridge  
Babbitt Steam Specialty Co., New Bedford  
Chase Turbine Manufacturing Co., Orange  
Berkshire Mill Supply Company, Pittsfield  
W. J. Foss Company, Springfield  
Mechanics Rubber Company, Worcester

### MICHIGAN

Ohio Rubber Supply Co., Detroit  
Delta Hardware Company, Escanaba  
Barclay Ayers & Bertsch Co., Grand Rapids  
Bond Supply Company, Kalamazoo

### MINNESOTA

Marshall-Wells Company, Duluth  
Strong-Scott Manufacturing Co., Minneapolis  
Wm. H. Ziegler Company, Inc.,  
Minneapolis

### MONTANA

Missoula Mercantile Co., Missoula

### MISSOURI

Bonne Terre Farming & Cattle Co.,  
Bonne Terre  
McNally Pump & Plumbing Supply Co.,  
Hannibal  
Hanna Rubber Company, Kansas City  
Stowe Hardware & Supply Co., Kansas City  
J. P. Bushnell Packing Supply Co., St. Louis  
Missouri Belting Company, St. Louis  
Schweitzer Brothers, Springfield

### NEBRASKA

Central Supply & Rubber Company, Omaha

### NEW HAMPSHIRE

Perkins, Bassett & Wright, Inc., Keene

### NEW JERSEY

Industrial Rubber Co., Elizabeth  
Smyth Rubber and Packing Co., Jersey City  
Goodyear Rubber Products Corp., Newark  
Phoenix Hardware Company, Newark  
Passaic Rubber Products Co., Passaic  
Burton Supply Co., Inc., Paterson  
Ten Hoeve Brothers, Paterson  
General Rubber Corp., Tenafly  
James E. Lambert, Trenton

### NEW MEXICO

Harry Cornelius Company, Albuquerque  
Mine Supply, Inc., Silver City

### NEW YORK

Donald Billings, Inc., Bronx  
L. H. Heberlein Inc., Brooklyn  
Greschler's, Brooklyn  
William Goldenblum & Co., Brooklyn  
Superior Oil and Belting, Brooklyn  
A. N. Nelson, Inc., Brooklyn  
Progressive Floor Covering Corp., Brooklyn  
Buffalo Rubber & Supply, Inc., Buffalo  
LeValley-McLead, Inc., Elmira  
Turcotte Mill Supply Company, Jamestown  
American Gross Equipment Sales Corp.,  
New York City  
Banner Hose & Rubber Co., Inc.,  
New York City  
I. Beck & Sons, New York City  
Wm. L. Blumberg Co., Inc., New York City  
The Darcoide Company, Inc., New York City  
The Durst Manufacturing Company, Inc.,  
New York City  
Gerard Packing and Belting Co.,  
New York City  
Goodyear Sundries and Mechanical  
Co., Inc., New York City  
Greater New York Carpet House, Inc.,  
New York City  
C. D. Greenbaum Co., Inc., New York City  
Griffin Engineering Corp., New York City  
Herman Kornahrens, Inc., New York City  
Loring Lane Co., New York City  
Mahoney-Clarke, Inc., New York City  
Miller Products Co., Inc., New York City  
H. J. Murray & Co., New York City  
The Safety Fire Extinguisher Co.,  
New York City  
Sickels Leder, Inc., New York City  
Stewart Dickson & Co., New York City  
Louis E. Strong Packing Company, Inc.,  
New York City  
William Summer Belting Co., New York City  
United Rubber Supply Co., New York City  
O. C. & K. R. Wilson, Inc., New York City  
O. W. Jackson & Co., Inc., New York City  
Bonner & Barnswell, Inc., New York City  
Central Rubber Products Co., Inc.,  
New York City  
Globe Hardware Co., New York City  
Excelsior Belting Company, New York City  
Hulbert Bros., Inc., Plattsburg

### NEW YORK (LONG ISLAND)

Complete Machinery & Equipment Co., Inc.,  
Long Island City  
Empire State Hardware and Supply Corp.,  
Long Island City  
Hester & Co., New Garden  
Local Steel and Supply Co., Inc., Mineola  
Alcan Machinery and Equipment Co., Inc.,  
Corona

### NORTH CAROLINA

Southern Rubber Company, Greensboro  
Machine & Supply Co., Inc., Morehead City  
Craven Foundry & Machine Co., New Bern  
Central Supply Company, Raleigh  
Carolina Machinery & Supply, Rocky Mount  
Shelby Supply Company, Shelby  
Mill & Contractors Supply Co., Wilmington

### OHIO

The Queen City Supply Co., Cincinnati  
The W. H. Summers Company, Cleveland  
The Hardy & Dischinger Company, Toledo

### OKLAHOMA

Talbot Rubber Company, Oklahoma City  
The Hapex Company, Tulsa

### OREGON

Goodyear Rubber & Asbestos Co., Portland

### PENNSYLVANIA

W. A. Tydeman & Son, Inc., Easton  
Industrial Motor Supply, Harrisburg  
Morton Mill Supply Company, Kingston  
Harold E. Smith, Lancaster  
Hercules Hose & Rubber Co., Philadelphia  
Stockwell Rubber Company, Philadelphia  
Boston Woven Hose & Rubber Co.,  
of Pittsburgh, Pittsburgh

### RHODE ISLAND

Read & Lundy, Inc., Providence

### SOUTH CAROLINA

Thackston-Davis Supply Co., Inc., Columbia  
Poe Hardware Company, Greenville

### TENNESSEE

Rogers Bailey Supply Co., Chattanooga  
Browning Belting & Supply Co., Knoxville  
Memphis Rubber & Supply Co., Memphis  
Nashville Machine & Supply Co., Nashville

### TEXAS

Abilene Electric Company, Abilene  
Dallas Pump Service, Dallas  
Shovel Supply Co., Dallas  
Texas Rubber Supply, Inc., Dallas  
El Paso Saw & Belting Supply Co., El Paso  
General Industrial Supply Corp., Fort Worth  
Peden Iron & Steel Company, Houston  
M. B. McKee Company, Lubbock  
D. E. Shipp Belting Company, Waco

### UTAH

Flinco, Inc., Salt Lake City

### VERMONT

Reed Supply Company, St. Johnsbury

### VIRGINIA

Farebee, Johnson, Co., Inc., Lynchburg  
The Henry Walke Co., Norfolk  
Norfolk Hardware Company, Norton  
Southern Railway Supply Co., Richmond  
Parker-Nimmo Supply Co., Inc., Salem

### WASHINGTON

Steam Supply & Rubber Company, Seattle  
Towne Equipment Company, Spokane

### WEST VIRGINIA

Anchor Sales Company, Beckley  
Bluefield Supply Company, Bluefield  
Rish Equipment Company, Bluefield  
Baldwin Supply Company, Charleston

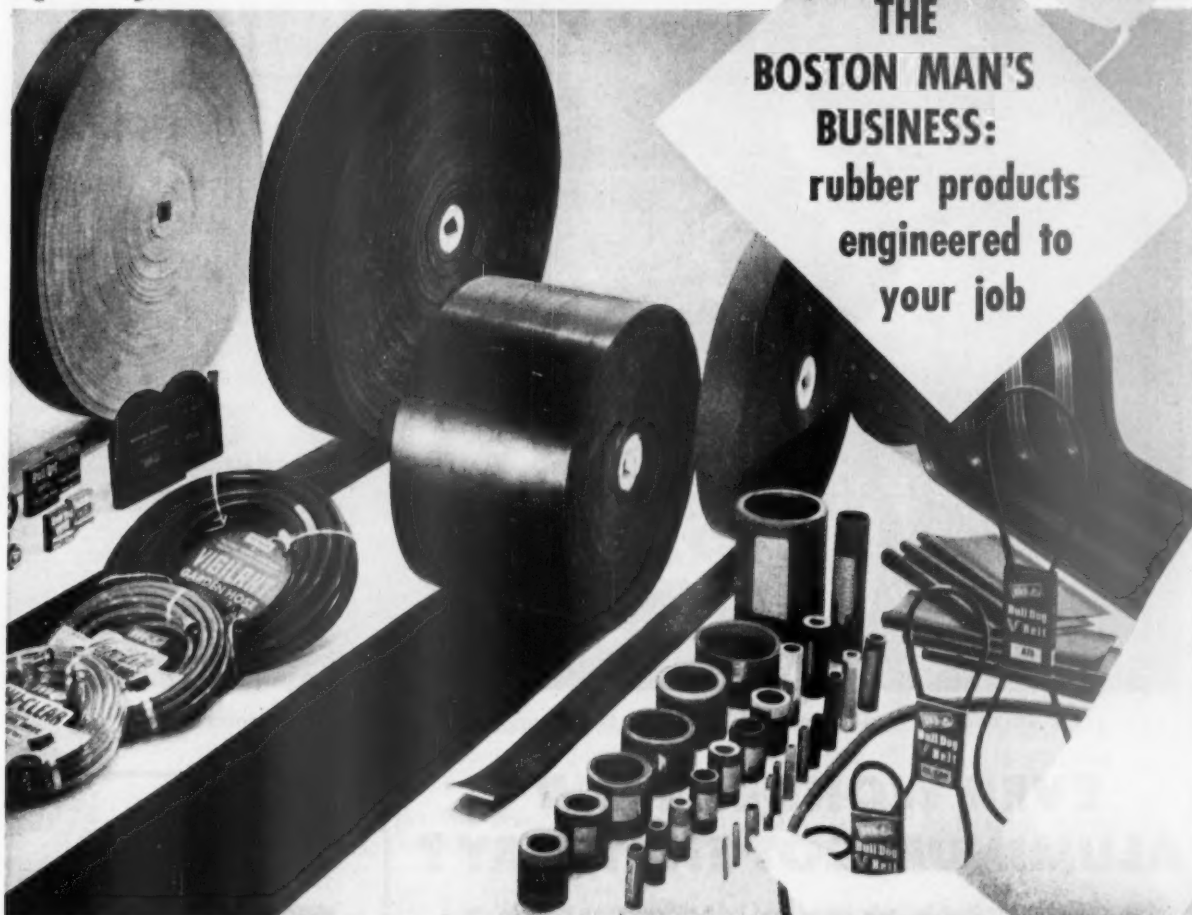
### WISCONSIN

Industrial Supplies Corporation, Appleton  
E. Garnick & Sons Hardware Co., Ashland  
The General Rubber Company, Milwaukee



**THE BOSTON MAN**  
IN 1880

**THE  
BOSTON MAN'S  
BUSINESS:  
rubber products  
engineered to  
your job**



**Fast-Moving Boston Research Gives You Better Industrial Rubber Products!**

The Boston Man has solved problems in many instances almost identical with one that may be costing you money.

If your company uses industrial rubber goods of any type—from V-belts to mighty river-spanning conveyor belts, slender tubing to giant steel-reinforced suction hose—it will pay you to do business with Boston's specialists. Behind every Boston product stands a background of research unsurpassed in the industry. And if your needs are out of the ordinary, Boston's staff of scientists, engineers and designers stand ready to meet your most exacting requirements.

Why not bring your problems to one of the world's largest specialists in the manufacture of mechanical rubber goods. See our distributor in your area. He is your "Boston Man."

# BOSTON

**BOSTON WOVEN HOSE & RUBBER CO., Box 1071, Boston 3, Mass.**



Industrial Hose • Belting • V-Belts • Packing • Tubing • Garden Hose • Tape • Matting



Installed by Westinghouse Distributor, J. P. Salmini Company, Bridgeport, Connecticut

## EVER WONDER HOW ALUMINUM GOT THAT WAY?

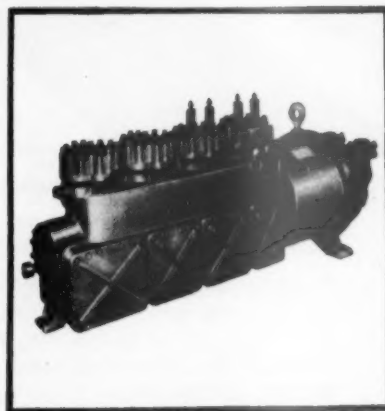
Most aluminum products must be corrosion-proof and scratch-resistant. Yet aluminum is basically a very soft metal. It gets its hard finish by anodizing. Immersed in sulphuric acid, the surface builds up a tough coating through electrolysis.

But the chemical reaction heats up the acid. If the bath gets too hot, the coating gets too soft. Result: rejects and lost man-hours.

At Scovill Manufacturing Company they consistently achieve a hard, uniform finish. The temperature of the

acid bath is kept at an even 70° by a Westinghouse refrigeration compressor. It provides chilled water circulated through pipes to absorb the excess heat.

If you have a process—or a product—which can be improved by refrigeration get in touch with Westinghouse. Chilled water or conditioned air can solve a lot of production problems. Call the Westinghouse Air Conditioning Distributor in your 'phone directory, or write Westinghouse Air Conditioning Division, Hyde Park 36, Mass.



This is the compact, lightweight compressor which makes this uniform process possible. And it does it efficiently. No belts, pulleys or shaft seals to give trouble. Because of its hermetically-sealed design, it cools itself with the refrigerant it pumps!

**WESTINGHOUSE  
AIR CONDITIONING**

----- YOU CAN BE SURE... IF IT'S **Westinghouse** -----

J-80331

# BUSINESS OUTLOOK

BUSINESS WEEK

DEC. 19, 1953

A BUSINESS WEEK

SERVICE

Some kind of official action to stimulate home building in 1954 becomes more and more certain almost by the day.

This week's report by the President's special advisory committee on housing (page 37) may not be the last word. Perhaps the program doesn't go far enough to suit Congress—even if it wins Administration sponsorship.

But it shows the way the wind is blowing—smaller down payments and easier installments, at least for low-income families.

Money supply, even more than any housing program, will hold the key to home building next year.

Here's the long and short of it: When money is tight, lenders seek an adequate return but stress safety; they don't risk the headaches of low-equity, long-payment mortgages (even if guaranteed).

If money eases, they won't be so choosy.

Housing, like most other industries, points to 1953 as a fine year. But, in common with business generally, it takes less pride in the trend of the last few months than in totals for the year as a whole.

• **Starts**—The number of new dwelling units started in the first half of 1953 ran a bit ahead of the year before; but the second half will fall behind by about 50,000 or perhaps 10%. (The year will be down 3%.)

• **Value**—A lag in starts isn't reflected at once in the value of work put in place on new homes (because work continues on homes started earlier). Thus the value of private residential construction in the last half of 1953 will run nearly 3% ahead despite the drop in starts (but it should be remembered that the gain was running 9% for the first half).

Here's the rosier figure on 1953 housing: Value of work done on privately financed new residential units will come close to \$10½-billion for a gain of about 5½% over 1952.

To get the private housing total, add a bit over \$1.1-billion spent during the year for additions and alterations, a gain of 5½% also.

If you're in a mood to worry over housing next year—and its influence on the over-all economy—you'll project the late-1953 trends.

New-home starts are running 10% under year-ago levels; value of work has fallen about 4% behind, with the margin of loss widening.

Such figures are hurtful not just to builders and on-site workers but also in the forest, on the farm, in the mill, mine, and factory. Home building provides untold man-hours of work hundreds of miles from the site.

Public works are popular as candidates to take up the slack in case construction generally lags. But roads and airports are by no means a complete substitute for home building.

You don't buy refrigerators, rugs, and upholstered chairs for plane runways, nor do you wire highways for appliance outlets.

That helps explain why business analysts (and politicians) will watch housing and any stimulants that may be applied. Even so, you're entitled to question the long-range soundness of lax mortgage terms.

# BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

DEC. 19, 1953

Most people talk of "a satisfactory housing year" in 1954. They are talking, by and large, of about "a million starts."

And that, by historical standards, would be very satisfactory indeed.

Never, before 1949, had this country had a million homes started in a single year. Never since 1949 have we fallen below.

But a million starts in 1954 would be 10% below the 1953 figure. And we can ill afford very many 10% declines in industries as big as housing if business activity is to turn up by mid-1954 (page 25).

—•—

December will write the difference, plus or minus, when fourth-quarter retail sales are totted up against a year ago.

The October and November changes, according to preliminary figures, just about cancel out. October volume for all stores (including automotive) was nearly \$200-million behind; November was \$240-million ahead.

A bare breakeven, however, shouldn't be too disappointing. The final quarter last year smashed all records. Even to match its dollar totals would be an achievement—particularly with prices a shade lower now.

—•—

You'll hear a rising hue and cry about consumer credit in the months just ahead, for two reasons:

- Dollar volume of consumer debt now is nearing a new peak.
- Repossessions of merchandise bought on installments, for the first time since early in World War II, are a perceptible factor.

Consumers, by yearend, will be in hock for roundly \$29-billion.

That will be a rise of about \$3.2-billion for the year. But note these factors: (1) The over-all rise in 1952 was larger by almost \$1.3-billion; (2) the fourth-quarter rise in 1952 was \$2.3-billion but will add up to very little over \$1-billion this year.

Thus the rate of rise has continued to slacken. And, early next year, repayments will exceed new loans substantially, washing down the total.

Installment debt, which has risen steadily since the war as a percentage of total consumer credit, will be close to \$22-billion on Dec. 31.

That's a rise of 100% in just over four years.

If you think about that for a minute, it must become very clear that the only wonder is that repossessions didn't soar long ago—and that they aren't much higher than a bothersome trickle by this time.

That could, of course, complicate the 1954 retail sales prospect.

—•—

There's been a lot of talk about the volume in soft goods taking up the slack as things got tougher for durable goods. Retail figures show, however, that nothing of the sort has been happening.

Through the end of November, retail sales in hard goods still were ahead of 1952. On the other hand, retail volume in soft goods broke even with a year ago in August and ran behind in both October and November (after registering a small gain in September).

The ratio probably will shift—but the talk, so far, is premature.

FROM PENNSALT

an outstanding new  
phosphatizing process

# FOSBOND



*Complete—even to a sales-building merchandising plan for you!*

Pennsalt's new Fosbond Process is an integrated series of operations and products for the phosphatizing of metal prior to organic finishing. Products processed with Fosbond have a more attractive, much longer-lasting surface because Fosbond locks the finish to the metal and provides lifetime corrosion resistance.

Behind this Process stand the extensive resources of Pennsalt—a major chemical producer for more than a century. Manufacturers using Fosbond can expect dependable, trouble-free phosphatizing and regular technical assistance from experienced Pennsalt specialists.

And here's a valuable merchandising "extra"! Fosbond has qualified for the famous *Good Housekeeping* Guaranty Seal. To gain public recognition and acceptance, the colorful Fosbond emblem incor-

porating this seal is being advertised in mass consumer magazines. Authorized manufacturers who affix this emblem to their Fosbonded products thereby gain a doubly effective sales builder!

Here, then, in one "package" are an outstanding new manufacturing technique and a dynamic merchandising plan for you. For a better finish on your product, for a smooth-running phosphatizing cycle in your plant, or for a worthwhile new sales feature—you ought to know more about Fosbond!

Give us details about your operations and we shall gladly answer your questions as specifically as possible. Write: Customer Service Dept., Pennsylvania Salt Manufacturing Company, 447 Widener Building, Philadelphia 7, Pa.

*Fosbond is a Pennsalt trademark*



PENNSYLVANIA SALT  
MANUFACTURING COMPANY



## FINGERTIP ANSWER TO A 70-TON PROBLEM

A hopper car loaded with coal can create a rugged problem during winter weather. For if moisture penetrates the coal and the temperature drops below freezing, the ice that forms will change the load into a semi-solid mass.

Unloading such frozen coal was once a time and labor consuming operation, but thanks to the Hewitt-Robins Car Shakeout the picture's changed. Now, with one touch of a button an entire car of frozen coal can be unloaded in a fraction of the time required when other methods are employed. On dry loads, too, the Car Shakeout's performance is equally remarkable . . . a full carload emptied in as little as 72 seconds!

For coal, stone, ore, grain—*whatever bulk material you must unload*—the Hewitt-Robins Car Shakeout provides the modern answer. It saves you time, money and labor. Already, *over half a billion tons* of free-flowing materials have been moved "down the hopper" by this modern materials handling unit.

Here is another typical example of the way in which Hewitt-Robins products and engineering services, contribute to American industrial progress. That's why if your problem involves the conveying or processing of bulk materials—liquids, gases or solids—Hewitt-Robins can provide the right answer.

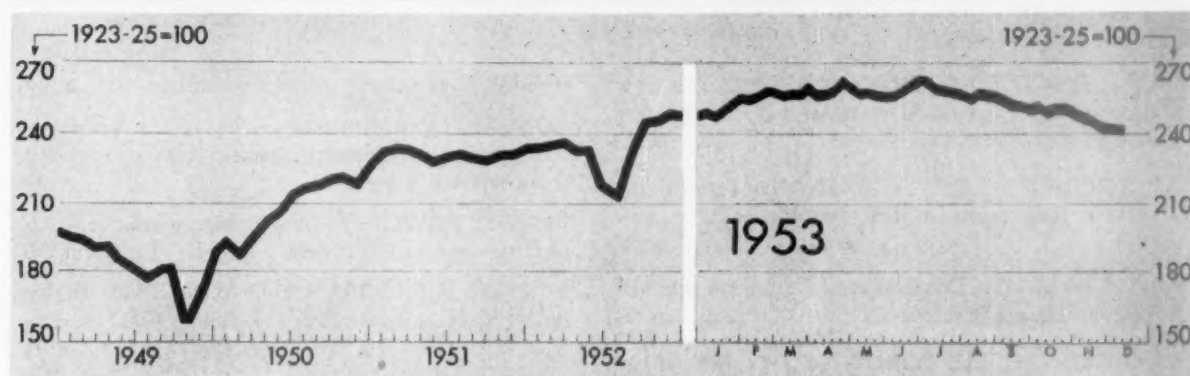
**HEWITT  ROBINS**

Executive Offices, Stamford, Connecticut

**DOMESTIC DIVISIONS:** Hewitt Rubber • Robins Conveyors • Robins Engineers • Restfoam

**FOREIGN SUBSIDIARIES:** Hewitt-Robins (Canada) Ltd., Montreal • Hewitt-Robins Internationale, Paris, France • Robins Conveyors (S. A.) Ltd., Johannesburg • **EXPORT DEPARTMENT:** New York City.

# FIGURES OF THE WEEK



**Business Week Index** (above) . . . . . \*243.8 †244.8 247.6 247.5 173.1

## PRODUCTION

Steel ingot production (thousands of tons).....	1,917	†1,955	2,044	2,236	1,281
Production of automobiles and trucks.....	108,834	†123,148	115,748	121,590	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$55,491	\$58,233	\$43,808	\$41,543	\$17,083
Electric power output (millions of kilowatt-hours).....	8,661	8,582	8,457	8,140	4,238
Crude oil and condensate production (daily av., thousands of bbls.).....	6,225	6,179	6,219	6,562	4,751
Bituminous coal production (daily average, thousands of tons).....	1,367	†1,484	1,470	1,673	1,745

## TRADE

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars).....	70	73	73	73	82
Carloadings: all other (daily av., thousands of cars).....	41	48	51	47	53
Department store sales (change from same week of preceding year).....	-3%	-4%	+3%	+1%	+30%
Business failures (Dun and Bradstreet, number).....	216	202	155	157	22

## PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100).....	409.0	408.7	396.0	402.5	311.9
Industrial raw materials, daily index (U. S. BLS, 1947-49 = 100).....	83.5	83.4	83.7	93.8	††73.2
Foodstuffs, daily index (U. S. BLS, 1947-49 = 100).....	95.5	96.6	93.3	84.7	††75.4
Finished steel, index (U. S. BLS, 1947-49 = 100).....	141.5	141.5	141.5	130.6	††76.4
Scrap steel composite (Iron Age, ton).....	\$30.67	\$32.00	\$35.33	*\$42.00	\$20.27
Copper (electrolytic, Connecticut Valley, E&MJ, lb.).....	29.985¢	29.985¢	29.915¢	24.500¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.38	\$2.38	\$2.34	\$2.48	\$1.97
Cotton, daily price (middling, ten designated markets, lb.).....	32.56¢	32.64¢	32.69¢	32.85¢	30.56¢
Wool tops (Boston, lb.).....	\$2.12	\$2.12	\$2.12	#	\$1.51

## FINANCE

90 stocks, price index (Standard & Poor's).....	196.8	197.9	193.6	206.7	135.7
Medium grade corporate bond yield (Baa issues, Moody's).....	3.73%	3.73%	3.75%	3.50%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	2 1/8%	2 1/8%	2 1/8%	2 1/8%	2 1/8%

## BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	55,159	54,376	53,675	55,866	††45,820
Total loans and investments, reporting member banks.....	80,386	80,522	80,494	79,338	††72,036
Commercial and agricultural loans, reporting member banks.....	23,081	23,134	23,340	23,321	††19,299
U. S. gov't guaranteed obligations held, reporting member banks.....	32,668	32,792	32,448	33,290	††49,879
Total federal reserve credit outstanding.....	26,681	26,302	26,111	26,860	23,883

## MONTHLY FIGURES OF THE WEEK

	Latest Month	Preceding Month	Year Ago	1946 Average
Housing starts (in thousands).....	80.0	88.0	86.1	55.9
Wholesale prices (U. S. BLS, 1947-49 = 100).....	109.8	* 110.2	110.7	78.7
Bank debits (in millions).....	\$141.115	\$149.738	\$127.647	††\$85.577
Exports (in millions).....	\$1,245	\$1,237	\$1,216	\$812
Imports (in millions).....	\$814	\$877	\$918	\$412

\* Preliminary, week ended December 12, 1953.

\*\* Basing pt., less broker's fee.

† Revised.

†† Estimate.

‡ Insufficient trading to establish a price.

§ Date for "Latest Week" on each series on request.

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**THE LABOR ANGLE:** Annual Wage Won't End Union Demands...p. 162

**SETBACK FOR UAW.** It took a licking in settling North American Aviation strike on original company terms .....p. 164

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**NEW DESIGNS FOR 1954 CONSUMER GOODS.** Manufacturers swamp industrial designers to nab consumer fancy—and dollars..p. 92

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**SOON THE WORLD WILL NEED THE ATOM FOR ENERGY.** Atomic fission may end up powering world instead of destroying it.....p. 180

## LOOK WHAT RUBBER PRODUCTS MADE WITH NEOPRENE ARE DOING



**NEW WEATHERSTRIPPING** has a spring-wire flange to hold the beading firmly in place and takes a right-angle turn when flange is slit. Neoprene coating over beading and flange provides protection against abrasion, moisture and temperature extremes.



**DISPOSABLE WORK CAP** of neoprene-treated paper (worn by worker above) is strong, lightweight, and resists most chemicals. One large chemical manufacturer reduced cap costs by 30%.



**"WE'VE SAVED \$4,800** since installing this neoprene conveyor belt eight years ago," reports manager of seed-processing mill. Vegetable oils and abrasion ruined ordinary belts in two years!

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### NEW DEPARTURE

#### BALL BEARINGS

NEW DEPARTURE • DIV. OF GENERAL MOTORS • BOSTON, MASSACHUSETTS

## 1954: Down to a Sunny Plateau

● That's the probable course of the U.S. economy for the next 12 months, now that the big boom of the early '50s has passed its peak.

● One by one, the sectors of the economy are readjusting downward from the dizzy levels of the boom.

● You can predict next year's course by the probable actions of government, business, and consumers.

Most economists, and most businessmen, predicted that the fabulous U. S. business boom of the early 1950s would reach its peak in 1953. They were right. The peak has come and gone on schedule. Most economic indicators are drifting downward; drifting grudgingly, perhaps, but steadily. This is the other side of the hill.

Some businessmen have been hurt already; more will be. But, broadly speaking, the trail forks here. One path leads straight down into a recession. The other ambles downward for a while and eventually levels off along a plateau. Which way is the U. S. economy headed?

• **Choice**—Some forecasters point to the steeper path. They fear the economy is committed to this path irredeemably. Business, they say, won't be able to reverse its present course; it will continue to slide down until it tumbles into the valley some time next year.

No one can say flatly that these forecasters are wrong. The workings of the postwar economy are still, in large part, mysterious. But all the evidence now at hand points to an entirely different prediction for 1954:

• The slide will continue well into the year. It will probably be steepest during the first six months, while the present top-heavy inventories of durable goods are worked off. But it will never get entirely out of hand. It will have the earmarks of a planned, orderly retreat. It will be, essentially, a readjustment from the abnormal levels of the boom.

• At some point during the year, this rolling readjustment should taper off. The economy will then move along horizontally, or perhaps even start climbing gently.

• **The Evidence**—If all business indicators were moving downward at the same time, and at about the same pace, then the skids might indeed be set for a recession. They aren't at the moment. The various sectors of the economy are starting their readjustment runs one at a time. Some important economic indicators, in fact, have remained high; among them are personal savings and capital expenditures for equipment. These are the symptoms of a rolling readjustment rather than the beginning of a steep run toward recession.

Perhaps more important than these present signs are the predictable factors in the future. You can pin a forecast for 1954 largely on three decisive elements: the government, business, and consumers. What these three giants do in 1954—barring a new international crisis—governs the course of the economy.

### I. The Government's Plans

The role that the government will play in the U. S. economy next year is in many ways the most important and the least clear of the three.

One fact is evident: Barring an international crisis, defense and other government spending will be a good deal lower next year than it has been this year. In 1954, business will no longer feel the driving power of increasing government spending.

The budget for 1954-55 that President Eisenhower will send to Congress next month is expected to call for total expenditures of \$67-billion—about \$5-billion less than the budget for the current fiscal year (which ends next June).

This cut in federal spending un-

doubtedly will tend to pull business down.

But spending is only part of the budget picture. There are two other points to consider:

• Taxes will be cut next year.

• Even on the most favorable assumptions, the federal government will still be operating at a deficit in the fiscal year 1954-55.

• **Those Tax Cuts**—At the beginning of 1954, the excess-profits tax will die, and personal income taxes will be cut by an average of 11%. This will mean an over-all tax cut of something like \$5-billion a year. Since fiscal 1954 is already half over, revenues will drop only \$2.5-billion in that year. But in fiscal 1954-55, the year that begins next June, they will be down the full amount.

In addition, Rep. Daniel A. Reed, chairman of the House Ways & Means Committee, has his heart set on a revision of the tax rules that would mean a further cut of \$1.5-billion a year.

These tax cuts will be a stimulus to business and consumers. But they may not be all net gain. If the increase in social security levies scheduled to take effect in January isn't canceled by Congress, it will largely offset the effects of the cut in income taxes for half the people. And if Congress later adopts new levies to replace the expiring taxes, the cuts that take effect next month may not mean much.

• **The Deficit**—Just how much the government runs in the red next year will depend on how deep the economy knife can cut and how serious Congress is about enacting new levies. The outlook now is for total revenues of something like \$62-billion—assuming no new taxes. That would leave a \$5-billion deficit if expenditures run \$67-billion—and correspondingly less if the Administration or Congress can pare something more out of the spending side of the budget.

The whole picture is complicated by the fact that the deficit won't be spread evenly over the year. In the first half of 1954, the government's big tax collections will exceed all expenditures for the period; there will be an actual cash surplus. Then in the second half, the government will go heavily into the red. And then in the first half of

1955, it will be back on a surplus basis temporarily. Nobody knows just how these wide swings will affect the workings of the economy.

On the whole, the budget for fiscal 1954-55 is somewhat more stimulating to the economy than the budget for fiscal 1953-54. But in the coming six months we will be living with the fiscal 1954 budget, and it's the rough six months—the months when the government is taking far more out of the economy than it is putting back in.

There's another point to bear in mind: If a real slide in business develops, tax collections—which are closely geared to income—will automatically drop. In fact, they will drop much faster than income drops. Thus, the deficit will mushroom if business goes into any major decline.

Add it all up, and you get a somewhat obscure picture—some pluses, some minuses. If there were no conscious effort in Washington to keep the effects of the budget from becoming a drag on business, you might predict at least some painful short-term adjustments.

But it is clear that Washington will be doing all that it can to keep the drop in federal spending from setting off the kind of business recession that would feed on itself.

• **Artificial Props**—Alongside its budget policy, the Administration has a fair-sized stock of special repair and maintenance tools at its disposal. And, equally important, it has the disposition to use them.

It has already approved the Federal Reserve System's new program of steady increases in the money supply, aimed at the twin goals of continued growth and long-term stability (BW—Dec.12 '53,p29). In addition, the Administration will call for extension of social security coverage and a rise in the minimum wage rates. It is preparing a public works program to apply if it's needed.

These government plans all work toward stability; they make the U.S. economy less likely to slide uncontrollably into a recession. If they fail, and if the budget and tax policies miss their predicted effects, the Administration can still resort to direct methods of breaking a slide—big-scale public works operations, for instance. If that happens, state and local governments will be given much more responsibility than they had in the economic emergency of the 1930s.

## II. Business' Plans

The McGraw-Hill survey of business spending plans early last month (BW—Nov.7'53,p27) showed that businessmen expect to spend only 4% less on plant and equipment next year than they have this year—the record year.

That's a pretty good indication that confidence has slipped little—and business confidence, or lack of it, is an important factor in determining the course of an economic slide.

You can count on a high level of spending for new plant and equipment during the first six months of 1954. According to the Dept. of Commerce, the figure may go as high as \$27.9-billion. That is a strong stimulant.

• **Construction**—The construction industry's activities are an element of strength, too. Construction spending dipped a little during the last half of this year, will probably continue to drop off in 1954. But the figure will still be impressive. Some segments of the industry will even show gains.

This industry provides an example of the kind of rolling readjustment process now under way throughout the entire U.S. economy. The Dept. of Commerce guesses that building of new dwelling units—about one-third of all construction business—will be down by about \$700-million next year. But refurbishing of houses, additions, and alterations will be up by some \$200-million. The drop in industrial plant construction will probably be offset by an upsurge in public utility and commercial building.

The total effect will be a drift downward for the construction industry. But it won't be a mass movement of the kind that might presage a recession. It's the same story throughout the economy.

• **Durables**—Probably the fastest-falling indicator of all—at least during early 1954—will be hard goods production. Sales of such items as autos and appliances have lagged behind output during the last few months. Inventories have piled up.

Steel inventories, for instance, are now almost twice the size of the stockpile existing before the steel strike of 1952. This pileup has occurred despite the fact that production has eased off to only 85% of capacity. (That 85% is deceptive, however; because steel capacity has grown fast during the past decade, today's 85% represents more steel than World War II's 100%.)

Steel men, and other hard goods producers, will undoubtedly put the brakes on even harder during the early months of 1954. Only Detroit's auto makers flatly refuse to go along (BW—Nov.28'53,p22). They'll ease off some, but not much. They plan their usual big first quarter—probably turning out cars at an annual rate of 5.5-million.

• **Employment**—The steady braking of business activity next year will mean what a widespread cutback always means—unemployment. But the unemployment figures aren't likely to reach a critical level.

For one thing, the business dip is

not likely to be very deep. For another, employment doesn't rise and fall in exact ratio with the ups and downs of production. A 10% production drop won't necessarily mean an equivalent drop in employment. More probably, it'll mean cuts in overtime and in the work week. It may also mean an actual shrinking of the work force. Marginal workers—women, and the very old and very young—will simply drop out of the picture.

## III. The \$200-Billion Pot

The third giant helmsman of the U.S. economy—working alongside business and the federal government—is the consumer. He may well turn out to be the most powerful of all.

In 1954, his income will drop. That's almost inevitable in a business slowdown. It probably won't drop to the point of hardship. But the average consumer may not earn enough to match his past level of big purchases—television, a car, furniture. If he wants to buy such big-ticket items, he will have to dissave—the economists' term for dipping into savings.

U.S. consumers have \$200-billion salted away in savings. That's the big pot. If business can make consumers open the lid, it can weather the 1954 dip with little pain.

• **Precedent**—Business has done it before. Consumers were induced to dissave during the 1949 slump, and their dissaving was the strongest force in reversing the downturn.

It will take plenty of advertising, plenty of dazzling new products to make the consumer repeat his 1949 performance. Manufacturers are ready to do their utmost (BW—Nov.21'53,p25). Also necessary will be some price trimming—but no wild cutting for consumers turn wary when prices are fluctuating sharply. If business handles the consumer cleverly, BW's studies indicate (BW—Nov.21'53,p58) the consumer will do the rest.

• **Backbone**—Keeping the consumer interested may turn out to be easier than it sounds—even in a time when consumer incomes are falling. The backbone of the American economy is its broad mass market, made up of millions of people intent on a steady rise in living standards.

The heady prosperity of the past decade, and its broad process of income redistribution—the steady bunching of the poor and rich toward the middle—has given these people much of what they want. But it has also made them want still more. The U.S. consumer has moved ahead for so long that he's no longer content to sit still. This insatiable desire for improvement may well feed another round of U.S. economic growth.

## New FRB Index: It's a more accurate measure of industrial production



## Retouching the Portrait

The Federal Reserve Board has just retouched the broad canvas that it paints on the U.S. economic scene in its Index of Industrial Production.

The changes—embodied in a revamped and refurbished method of constructing the index—make some significant alterations in the industrial portrait of the postwar years (chart, above). Thus the new index shows the postwar upswing as starting lower and finishing higher than it did in the old index. By the same token, the slump of 1949 looks less fearsome in the new and better index.

The new index is based on some fairly radical improvements in weighting and adjusting a substantially increased mass of data. Notable changes include:

**Weighting:** The new index places considerably more stress on hard goods.

**Sources:** The new index is able to use more figures on output measured in hard and fast production quantities. The old index leaned heavily on statistics of man-hours worked—not because it preferred them as a measure, but because such figures could often be secured as much as six months before those on production quantities.

Just in machinery, the new index is able to base its figure on 17 series, of which 12 represent physical quantities.

The earlier version had only one series, based on man-hours.

**Breakdowns:** The old index frequently measured a whole industrial chain by one of its ends. Thus steel and its products, say, would be measured on the single basis of ingot production, on the theory that all the ingots turned out would pass through the whole fabricating cycle. The flaw here was that the method could not reflect any piling up of inventory along the line. To get around this, the new index breaks down the chain into its component links.

For example, the old index based its figures for textiles and apparel solely on the production of yard goods. The new index arrives at its figure by giving almost equal weight to both the products of the mill and the products of the cutting room.

**Broader base:** The new index is based on 175 basic monthly indexes; its predecessor used only 100. And various newly hatched industries are now included: 38 items, or 17% of the total weight, are used for the first time.

**Corrections:** The old index appeared monthly, but without any annual revision to clean up accumulated errors. Cumulatively, these errors could become serious. The new index tidies itself up once a year.

## Samish Loses

Conviction of California lobbyist may have repercussions in state marketing law and along Madison Avenue.

Back-slapping, 260-lb. Arthur H. Samish—a man who has been described as “the secret boss of California”—stood before a San Francisco federal judge last week and heard himself sentenced to three years in prison and a fine of \$40,000 for evading \$71,878 in federal income taxes.

• **Commissions?**—The basis of the government's case against Samish was that he failed to report as income 39 checks totaling \$95,000 that he received over a six-year period from the Biow Co., big New York advertising agency. The U.S. charged that the checks were commissions to Samish for using his influence to get and keep Schenley Industries' advertising business for Biow. The agency resigned the last of the account in January, 1952.

During the trial, Milton Biow, board chairman of the agency, testified that Samish was paid to “condition” the account and later to “keep Schenley on the rails when we were having trouble with them.” Samish contended that the money represented gifts by Biow Co. to friends of Samish and political contributions that the agency wanted to make through Samish.

During the era of his Biow relationship, Samish acted as public relations counsel and lobbyist for, among others, the Brewers' Institute of California, Schenley Industries, Philip Morris, and Trans World Airlines. His main activity, however, was controlling and dispensing a political fund of the Brewers' Institute, estimated at several hundred thousand dollars a year.

Without doubt, Samish has influenced a considerable amount of legislation—particularly in the liquor-marketing area. Even now, at midweek, there was talk of secret industry meetings and hints that, even in prison, Artie Samish might not be easy to get rid of.

• **Repercussions**—Along advertising row, meanwhile, the Biow-Samish tie-up has produced a mixture of embarrassment and self-righteousness. The American Assn. of Advertising Agencies last week called attention to its code condemning payments by an agency to anyone connected with an advertiser.

Biow Co., itself, has had four accounts leave the agency in recent months, with another slated to go Jan. 1. President F. Kenneth Beim, however, says that “no business . . . has been in any way affected by . . . the case.”

# Double Trouble for Moscow

The U. S. diplomatic offensive has the Kremlin on an atomic hook. Internally, shortages of food and consumer goods compound Malenkov's problems.

Strong pressures, both domestic and foreign, are building up to plague the Kremlin. They are bound to influence the "new course" in Soviet economic policy and probably Soviet foreign policy as well.

These pressures may even push the Malenkov regime into another power struggle of the sort that led to the ouster of police chief Beria late last spring. Certainly they will thwart any return to "Stalinism" in Russia.

• **Challenge on Two Fronts**—On the foreign front, Malenkov and Molotov face a powerful diplomatic offensive from the U. S. This offensive is compounded of Eisenhower's United Nations bid for atomic talks, the U. S. drive to rearm Germany through the European Defense Community, and the growing flexibility of our policy in the Far East (BW—Dec. 12 '53, p. 27). Barring a big rift in the Western alliance, this U. S. offensive could force the Communist bloc to come to terms on Korea and perhaps on Indo-China and Germany.

At home, Malenkov has to cope with a three-way threat: factional infighting at the top level, a growing agricultural crisis, and lack of progress in boosting the output of consumer goods. Add the economic strains in Eastern Europe and the economic demands of Red China, and you come to this conclusion:

Malenkov may soon have to divert a sizable share of Soviet resources away from defense industry.

## I. Pressure from Without

Eisenhower's U. N. speech has done more than strengthen U. S. leadership of the West: It has put the Kremlin on a diplomatic hook. If Moscow rejects the U. S. atomic proposals, it will suffer grievous diplomatic and psychological losses. It can go along for purely propaganda purposes, of course. But in time this tactic would be exposed and would prove as dangerous to Soviet prestige as an immediate rejection. Moreover, some officials in Moscow may feel it would be in Russia's interests to try to negotiate an easing of tension on the atomic front.

• **Germany**—At the upcoming Big Four meeting in Berlin, the U. S. will be leading from strength—from the fact that Russia has lost the game in Germany. Two things settled that: the June 17 uprising in East Germany

and the Sept. 6 elections in West Germany, which gave Adenauer a sweeping victory. It was these developments that led the Malenkov regime to decide last fall against early Big Four talks on Germany. Then persistent U. S. pressure for EDC and German rearmament forced the Kremlin to change its mind, agree to meet in Berlin.

That doesn't mean that there will be any Soviet concessions soon on Germany. But the chances are that Molotov will have to offer something on Austria if, as it seems, he aims to keep present East-West positions in Europe from freezing.

• **Asian Arena**—In Asia, there is a weak spot in the U. S. armor—Indo-China. There, our problem is to overcome French reluctance to fight for a clear-cut victory. You can be sure Molotov will do all he can at Berlin to exploit this position by tempting the French with an Indo-Chinese truce tied to a French decision against EDC.

Still, even in Asia the U. S. position is basically strong. It is backed by growing military strength and by a more flexible policy.

## II. Pressure from Within

There's no doubt that the Malenkov regime is under serious pressures at home, though the outside world can't tell just how serious they are.

The political shuffling still goes on. The latest topside victim was a close associate of Molotov—Vassily Adrianov, Communist Party boss in Leningrad and a former member of the Presidium (successor to the Politburo). Within a few months the Soviet Ministry of Agriculture has had three different bosses.

The shuffling undoubtedly reflects the most bitter kind of factional infighting. And that can be more important now than it was in Stalin's day. With decisions emanating from a "collective leadership" instead of one man, factional strife can delay policy making and interfere with the execution of policies already made.

It's even possible that the factional fights are primarily about economic policy—what to do about agriculture and consumer goods production.

• **Farm Failure**—Progress on the farms looks slim indeed, despite the furor whipped up late last summer by Malenkov and Communist Party boss Khrushchev (BW—Sep. 26 '53, p. 31). Khrushchev

admitted bankruptcy of Stalin's agricultural policy, talked about boosting farm output 50% by 1955. This goal was obviously a pie-in-the-sky affair. Probably all that Malenkov expected was to get Soviet agriculture on a footing where per capita output would at least start to move up. And for the short term he wanted a quick boost in deliveries of meat, potatoes, and vegetables.

To achieve these goals the Kremlin moved on two fronts. On the one hand, it promised the collective farmers new incentives. On the other, it decided to tighten party control on the farms, called for 50,000 party workers, including farm technicians, to leave their city desks and go to the country.

There is no way yet of telling just how the Soviet peasant has reacted to the new incentives. But it is certain that an early hard winter has more than wiped out any gains on that score. Potato deliveries are far behind schedule. Cattle are being lost by the thousands for lack of fodder and shelter. Meanwhile Soviet city bureaucrats are not answering the rural call. Pravda, the Communist Party newspaper, gives the impression that the agricultural plans of the Malenkov regime may be near collapse, that Russia for the first time since 1946 may be short of grain, potatoes, and cabbages.

• **Consumer Goods Flop**—One of Malenkov's first promises was to give the Soviet consumer a better break. He promised to boost the output of consumer goods 70% by 1955.

Now it looks as if this program is heading for a flop, too. For one thing, any expansion of Soviet light industry, which gets the bulk of its raw materials from agriculture, is largely dependent on higher farm output. For another, the Soviet system of distribution just isn't geared to take care of the consumer. Today Russia's 210-million people are served by 450,000 stores of all kinds; about 3-million people are in the retail trade. That compares with 1.7-million retail stores in the U. S. and 8-million people in retail distribution.

If you can believe the Soviet press, consumer goods industries haven't done much to boost their output.

Lack of any real headway in either agriculture or light industry probably explains why Soviet trade missions in Western Europe are now trying desperately to buy foodstuffs, consumer goods, and machinery for light industry. During the last few months Soviet purchases of butter and fish have shot way up. So have orders for textiles, especially in Italy, Belgium, and Britain. A \$30-million order for textile machinery has been placed with a British firm and pressing inquiries are now being made for food-processing machinery.



CORDINER, GE president, set up loyalty rules when . . . McCARTHY said Reds had wormed their way onto the payroll.

## Combing Communists Out of GE

Any of GE's 230,000 workers can be fired now if he admits he's a Communist, spy, or saboteur.

Sen. Joseph R. McCarthy of Wisconsin, easily the most controversial figure in public life, made his mark on private industry this week. His investigations of Communist infiltration of General Electric plants led that company to inaugurate a loyalty program—the first, as far as is known, to be instituted by any important nongovernmental or noninstitutional employer.

• **Battleground**—GE has been involved with the Communist problem before. Its operations have been a battleground for two bitterly antagonistic unions, one allegedly Communist-dominated, the other vociferously anti-Communist.

This has drawn GE into the tortuous byways of leftwing politics—an experience that most U.S. employers have been fortunate enough to avoid. Caught in a crossfire of charges and countercharges on its turbulent labor front, the company took some pride in giving as good as it got.

But it was in no mood to take on the junior Senator from Wisconsin. After he made some accusations against GE personnel, following five days of hearings, the company modified a policy it had maintained for years.

• **Change of Policy**—GE had held that it was the government's responsibility to designate employable and unemployable staff on company work with which the government was concerned. When McCarthy implied that GE was some-

thing of a Communist haven, the Communist issue became more than an employee relations problem. It became a matter of high policy. The result was a new set of rules that came directly from Ralph J. Cordiner, GE president.

GE's new stand calls for the immediate discharge of "all admitted Communists, spies, and saboteurs." It provides for suspension of all employees "who refuse to testify under oath on such matters when queried in public hearings conducted by competent government authority." These rules are not confined to GE workers on defense jobs. They apply to all 230,000 employees in 131 plants.

• **How It Will Work**—The company has emphasized that it will not act punitively against employees charged with Communist connections when those charges come from a nonofficial source. Nor will it discharge a man only on McCarthy's say-so. If an accusation is to be taken seriously by GE, it must be made in an open hearing before a "competent government authority." The man himself must admit the truth of the accusation.

If a charge is made before, say, a congressional committee, the employee is given 90 days to appear before the committee and deny the accusation under oath. GE has not yet determined what its policy will be if the man in question is denied an opportunity to appear.

If the individual in question denies the charges under oath within the 90-day period, he will be reinstated with no loss of straight-time average earnings.

GE has yet to decide what it will do if an individual satisfies its rule of sworn denial by perjuring himself. The classic case of this sort is that of Alger Hiss, whose sworn denial of any espionage activities would satisfy GE's requirements as they now stand. It is evident that elaborations and refinements of GE's policy will be forthcoming.

• **Stirring a Storm**—Although the new GE policy is a matter that affects the individual company employee, it immediately became a ground for argument between the unions that compete to represent the company's work force.

James Carey, head of the anti-Communist International Union of Electrical Workers-CIO (IUE), criticized the policy as doing "nothing to interfere with the national ringleaders" of the rival United Electrical Workers (UE).

UE leaders, in turn, denounced GE's policy as "un-American and antilabor" and promised that its members would "take appropriate steps to protect the job security of all GE workers." That sounded ominously like a strike threat, the seriousness of which would be revealed when GE fired the first Communist at a UE plant.

• **Tough History**—Such tough talk has characterized the company's labor relations since 1949, when the CIO kicked out the UE, along with a number of other affiliates, after finding "Communist domination." The CIO followed

up this action in the electrical manufacturing field by chartering a new union, the IUE.

When all of UE's members did not immediately flock to IUE's standard, IUE charged GE, the biggest employer in its field, with coddling Communists. The company has persistently and vehemently denied this charge. In essence, its position has been that it must, under the law, deal with unions certified by the National Labor Relations Board; if that board certifies Communist-controlled unions, there is nothing GE can do about it.

Representatives of GE have repeatedly appeared before congressional committees asking that Congress legislate on Communist union domination. The company also asks that Congress establish an independent security agency to pass on cases of accused or suspected employees of private industry—the very job that GE is now reluctantly undertaking.

• **Rosenberg Link**—It seems clear, however, that Sen. McCarthy's interest in General Electric did not develop from the labor relations angle. Julius Rosenberg, the executed atom spy, worked at the Fort Monmouth (N. J.) Signal Corps radar laboratories in 1945. His accomplice, Morton Sobell, worked at the GE Schenectady plant in 1947.

In his recent investigations of Fort Monmouth, McCarthy came across trails that led him into GE plants. He held two days of hearings in Schenectady and three days of hearings in Boston.

When he wound up his GE investigations, he made a public statement that Communists were infiltrating GE. This led the company to adopt its unprecedented policy.

Sen. McCarthy refused to comment on the specific details of GE policy.

## Detroit Builds A Computation Center

This week, a \$500,000 electronic computation laboratory went into operation at Wayne University, Detroit. It's ready to go to work for any company that wants a complicated mathematical problem solved fast.

The computation center—believed to be the only such center in the country not government-financed—is a cooperative venture of the university and several Detroit companies. Burroughs Corp. built the computing machine; General Motors Corp., Ford Motor Co., and other companies contributed toward construction and operating expenses.

The project also involves a training program on the science of mastering electronic brains.

## Private Power . . .

**. . . will play bigger role in fighting shortage in Northwest. But government will still have to help.**

The shift from a Democratic to a Republican national administration last January did nothing to alter the fact that the Pacific Northwest is critically short of electric power. But it did raise a big question as to who is going to supply that power.

The federal government—through the Bonneville Power Administration—has been chiefly responsible for the development of the Northwest's power ever since BPA was first set up, in 1937. The concept of federal participation, at least, in power development is so deeply integrated into the economic structure of the area today that no one in the area—not even the most convinced private-enterprise stalwart—wants to see it thrown out entirely.

• **In or Out?**—The questions that have been kicking around ever since Oregon's former governor, Douglas McKay, took over in January as President Eisenhower's Secretary of the Interior are: "How far should the federal government get out of the power business? Who will take its place?"

Last week two separate groups in the Northwest took positive steps toward finding the answers:

• At a meeting called by the governors of the four northwestern states (Washington, Oregon, Idaho, and Montana) a policy committee was created to plan for development of the area's power by private interests in cooperation with the federal government, as suggested by the President's "partnership program." Represented on the committee in addition to the four governors are British Columbia, the Army Engineers, the Interior Dept., the Federal Power Commission, and the members of the Northwest Power Pool, which includes BPA and practically all of the private and public utilities in the area.

• The six major private power companies in the area announced (at the governors' meeting) plans to set up a joint corporation to generate and transmit electric energy, including construction of major new dams on the Columbia River and its tributaries. The six are Montana Power Co., Idaho Power Co., Mountain States Power Co., Washington Water Power Co., Pacific Power & Light Co., and Portland General Electric Co.

• **What's Ahead?**—Everyone at the governors' meeting agreed on the accuracy of a long-range analysis of the situation

made by BPA. This forecast is divided roughly into two parts. The first part predicts that the area will just barely get by until 1960—if all construction presently under way is put through on schedule, and if no major new power-using industries are set up in the area in the meantime.

It is after 1960 that the real pinch begins. By that time all construction now under way should be pretty well cleaned up. And, since it takes so long to build the big power dams, new projects would have to be started within a year from now to take care of power needs in the early 1960s.

The long-range estimates are for a shortage of 2-million kw. of capacity by 1965; between 5.5-million kw. and 7-million kw. by 1972.

What is going to be done about it? Here's the way the picture looks as of now:

The federal government will have to keep presently scheduled construction right on the dot or the whole situation will become complete chaos. Today's crisis is due in large part to the fact that the 1946 Congress threw out all BPA construction appropriations.

Private utilities—as indicated by the six companies' announcement—hope to build enough new capacity to take care of the expansion of their loads due to the normal growth of population, business, and industry in their areas. They are not planning for any big new industrial loads (such as new aluminum or titanium)—at least not yet.

Public utility districts in Washington have proposed two major projects. Grant County PUD wants to build the 1.1-million-kw. Priest Rapids Dam, a BPA future project on the Columbia above Hanford. It would sell the excess power, probably through BPA. Financing would be through revenue bonds. Chelan County PUD has filed for a permit to build 595,000-kw. Rocky Reach Dam upstream from Priest Rapids. It has been working with Secretary McKay on a plan whereby the Army Engineers would build the dam, the PUD would finance it, BPA would contract to sell the excess energy, and Congress would appropriate funds for navigation, flood-control, and other nonpower aspects of the dam.

• **Rates Will Rise**—This last is an absolute essential in all of the plans. If the federal government doesn't continue to pick up the tab for that part of dam costs directly allocable to nonpower uses, power costs in the area would skyrocket out of reach. Even if Congress and the Administration cooperate on this point, most people agree that the present BPA rate level (\$17.50 per kilowatt-year) is unrealistically low. Apparently the era of very cheap power is fast coming to an end in the Northwest.



**Adm. Arthur W. Radford**  
*Defense Strategy*



**Albert M. Cole**  
*Housing*



**E. Barrett Prettyman**  
*Procedures*



**William I. Myers**  
*Farm Supports*



## Shaping a Program for Congress

The quiet, build-up phase of President Eisenhower's first year in office ended with a rush this week.

The President went over to the political offensive with a list of proposals that he believes will win or lose for the Republicans in next year's congressional elections.

Great chunks of the "progressive, dynamic program enhancing the welfare of the people"—which Eisenhower had promised earlier this month—were revealed in the form of commission reports.

Other parts leaked out of commission hearings.

And the full details are being laid before Republican leaders of Congress in three packed days of White House conferences.

• **Fast Talk**—Eisenhower drove himself and his aides at top speed getting ready for the parade of congressional leaders. He crowded three Cabinet meetings into a 10-day period.

On Tuesday of this week, he began with the National Security Council at 8:30, went into the wind-up Cabinet meeting at 10:15, saw Adm. Arthur W. Radford, chairman of the Joint Chiefs of Staff at 2:15, and then discussed the pending state-federal relations report with chairman Clarence Manion.

• **Breakers Ahead**—Enough of this program became known to reveal significant changes. In general, Eisenhower's concept of the middle way came out on top. But plainly, some of the suggestions by his commissions won't rest well with lawmakers.

### I. National Defense

Eisenhower's new defense package wraps up two items: (1) a military budget for the fiscal year starting next July, and (2) the long-awaited New Look of the new Joint Chiefs of Staff.

• **Budget**—The budget wears the Old Look. It is based on pencil work of the

Omar Bradley team of Joint Chiefs. That's because the new team—Adm. Radford (above), Adm. Robert B. Carney, Gen. Matthew B. Ridgway, Gen. Nathan F. Twining—wasn't appointed until midsummer, which didn't leave time to work out a new budget basis.

Figures are still under wraps, but it is believed that Defense Secretary Charles E. Wilson will ask for about \$40-billion for the coming fiscal year. Military chiefs look at that fiscal year as a time of transition to the newly mapped strategy. The trend in spending will be down, though—maybe to \$30-billion or \$32-billion in 1956-57.

• **Strategy**—The big news is the chiefs' New Look in military planning. Gone is the "balanced forces" concept of the Bradley team, under which the service branches split manpower, money, and strategic roles fairly evenly. In the new program, the Air Force stands out clearly as the dominant service.

Capitol Hill should find the new

strategy palatable. For one thing, it suggests a tapering of defense spending between now and the end of 1957. For another, it centers around air power, a pet policy of many military tacticians on the floor of Congress.

- **Cut in Manpower**—Over-all, the military services are scheduled to drop 400,000 men between now and mid-1955. That's a cut from 3.5-million on active duty now to about 3.1-million. After that, the strategists will take another look at the world situation. They may then order another cut of 200,000.

In detail, this is how it works out:

- **The Army** will cut its manpower by 10% next year, more later if the world situation permits. According to the Radford plan, the Army will maintain its present strength of 26 divisions on active duty as long as Korea remains unsettled. But it will have to cut down on noncombat troops—at present, only 600,000 of the Army's 1.5-million men are in combat category.

- **The Navy** will take an undisclosed number of its 405 combat ships out of active service, drop 200,000 of its 850,000 men. Instead of modernizing all fleet units, it will concentrate on aviation, aircraft carriers, submarines, and antisubmarine forces.

- **The Marine Corps** will probably shrink from three to two active-duty divisions by 1957, but Marine aviation will stay at the present three wings.

- **The Air Force**, meanwhile, will be growing. Manpower will increase from 925,000 now to more than 1-million. The number of wings (varying in size from 35 planes to 75 planes each) will rise from 110 now to 137 in the next three years.

- **Atoms for All**—Radford hopes to offset the cut in uniformed manpower by a gain in new weapons and equipment. For one thing, under his program all services will use atomic weapons. They're all theoretically capable of employing atomic weapons right now, but Radford looks to when these will be conventional equipment.

- **Outlook for Business**—For business, the change in military strategy means:

- Continued high spending for aircraft, electronics, and related procurement for the next four to six years.

- Less demand for manpower by Selective Service. Instead of climbing from the present 23,000 men a month, the draft will likely settle at around 15,000 men.

- Naval shipbuilding will dwindle. Instead of the \$600-million to \$800-million rate previously forecast for 1957, it will amount to less than half of these figures.

## II. Housing

Washington again will underwrite a 1-million-start housing industry in 1954.

That's the substance of recommendations by the President's advisory committee on housing programs and policies. The 22-man committee has labored since September, has produced a 3-lb. report that proposes:

- **Easier terms for FHA-insured financing** of new houses—raising the loan ceiling from \$16,000 to \$20,000 for a single-family house, lengthening amortization to a uniform 30-yr. maximum, cutting down payments on properties costing more than \$7,000.

- **Equal FHA terms for old houses.** Old houses are now eligible for only 80% of value up to \$7,000, compared with 95% for a new house.

- **More liberal loans for modernization and repair,** maybe a \$3,000 maximum for a 5-yr. loan instead of \$2,500 for 3 yr. on a single-family house.

- **Encouragement of apartment houses and cooperative housing** by higher loan ceilings, with even more liberality for fire-resistant buildings.

- **As a starter toward privately financed public housing,** an experiment with special FHA incentives. Low-income families could buy homes with no down-payment and a 40-yr. payoff. Builders and owners could get FHA commitment for 85% of a 40-yr. loan on rental housing—new or rehabilitated—that would be rented under a lease-purchase agreement enabling a tenant to buy when his income improved.

- **Pending outcome of the experiment,** continue the present low-rent subsidized housing program.

- **Fanny Mae**—The major switch proposed by the committee aims at replacing the Federal National Mortgages Assn. with a privately financed corporation that would buy government-backed mortgages from lending institutions.

Federal housing loan banks might help this corporation raise its initial \$50-million capital. But the capital stock would eventually be owned by the lenders who use its services—they'd buy stock equal to 4% of the unpaid balance on their mortgages.

## III. Farm Supports

The Advisory Commission of Agriculture reports to Secretary Ezra Taft Benson, but "leaks" to the press have made plain how the group is thinking—and what Benson will probably propose. The Benson plan that's shaping up calls for the use of just about every price support gimmick in the books: domestic-foreign price systems, direct payments to producers, marketing agreements, sliding-scale supports, high support with strict acreage controls.

- **Two-Price System**—For example, the group suggests a two-price system for wheat, cotton, and rice. A farmer would get 90% support only on the

part of his crop that normally goes to the domestic market—on wheat, only half his crop since only half of all U. S. wheat fills domestic needs.

- **Other Schemes**—For wool, the advisory group recommends direct payments to producers at so much a pound, to make up the difference between his market price and 90% of parity. This is substantially what Truman's Secretary Charles Brannan proposed. It's not new: Growers of sugar cane and sugar beets have received government checks just this way for years.

For vegetables and other perishables, the group recommends marketing agreements of the citrus-industry type. For tobacco, it wants to continue the present tight control on production, with 90% parity assured. For dairy products, the advisers propose lowering price supports, to let the consumer buy more butter, for example, and the government buy less.

- **Rough Going**—Such a program faces rough going—in this week's White House conferences and in Congress, if it ever gets that far in present form.

Best bet: Eisenhower will give farm policy a quick brush in his State of the Union message, leave it to Benson to spell out his proposals in the agriculture committees of Congress. And Congress will pass virtually a simple extender of present laws.

## IV. Tariffs and Weather

President Eisenhower has also farmed out studies of many other areas of government, ranging from tariffs to forecasting the weather. These studies, too, will be reflected in the 1954 Administration policy.

- **Views on Trade**—Clarence Randall's foreign economic policy commission is pushing to complete its report in time for Eisenhower to refer to it in his State of the Union message. But a sizable minority within the group is opposing some of the findings.

The Randall majority thinks about this way: Maintain the present reciprocal trade program without any dramatic changes; offer some way of giving a subsidy to domestic industries that are hurt by imports, rather than raising trade barriers for protection.

- **Weather**—A committee of experts on weather has proposed more decentralization of the Weather Bureau—and more transfer of Bureau services to private companies. The committee suggested that the government leave to private enterprise such services as advising on factory sites and gas markets, and where to drill oil wells offshore.

Another field that affects businessmen is the study of administrative procedures. The President's committee has sent technical recommendations to Attorney General Herbert Brownell.

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# Rockwell Report



by **W. F. ROCKWELL, JR.**  
*President*  
**Rockwell Manufacturing Company**

**Y**OU MAY HAVE SEEN the announcement of our purchase of Callander Foundry and Manufacturing Company, Ltd., of Guelph, Ontario, Canada's largest maker of power tools for home and industry. We regard this as one of the most important recent steps in our planned program of growth and diversification.

In addition to its Beaver Power Tools, Callander makes a line of electrical conduit fittings which have a fine reputation. The company was founded in 1916, and has grown steadily since then. During the second World War it made a wonderful record in the production of military items.

Callander will continue under its present management. Beaver Power Tools will continue to be distributed through Callander's dealer organization in Canada, Canadian "cousins" of our own Delta Power Tools.

We have brought Callander into our corporate structure because we believe in the soundness of the Canadian economy and in the brightness of its future. This step will enable us to take full advantage of the great power tool sales opportunities there. We feel that both our company and the Callander organization will benefit.

Incidentally, during our recent trips to Canada we were impressed again by the friendliness and respect with which Canadians and Americans regard one another. Living side by side year after year without border armaments—or border incidents—Canada and the United States present a healthful example to a somewhat bilious world.

With each quarterly dividend check we enclose an informative folder designed to help our 9,000 shareholders become better acquainted with our products and the markets we serve. A recent one was devoted to the rapidly expanding gas industry and its importance not only to Rockwell, but to the nation as a whole. The Gas Appliance Manufacturers Association thought enough of it to reproduce and distribute it to its entire membership.

**New Rockwell Products:** 27 new moulding cutter knives are now being offered by Delta Power Tool dealers at \$3.95 each per set. These new knives make it possible for the user to copy any moulding he desires, in addition to fashioning custom patterns . . . Our Register Division has introduced a new electrically-operated counter for easy, accurate fare recording and industrial counting of any sort. It is also well suited for use on amusement park rides, where a rapid and reliable counting of heads is good business . . . The new Rockwell die-cast aluminum gas meter, with a rated capacity of 415 cubic feet per hour, weighs only 20 pounds as compared with 62 pounds for cast iron meters of the same capacity—making possible new savings in shipping and handling costs.

Periodically, in most companies, the question arises: Do veteran salesmen need refresher courses? We believe such courses never do any harm, and are apt to do considerable good. Recently we conducted a refresher course for those of our men, including veterans, serving the gas industry. It began in Cleveland, moved to plants in Barberton, DuBois, and Pittsburgh, covering up-to-date production as well as sales techniques. Old dogs often surprise even themselves by learning new tricks—or remembering good old ones they'd forgotten.

One of a series of informal reports on the operations and growth of the  
**ROCKWELL MANUFACTURING COMPANY**  
PITTSBURGH 8, PA.

for its customers, suppliers, employees, stockholders, and other friends



## BUSINESS BRIEFS

**Christmas notes:** The steel industry, which traditionally takes no holidays, is easing back this year to a point where production may drop to 80% of capacity. . . . The auto industry, which always does take holidays, is taking more than usual. The aim: to let dealers get rid of excess stocks.

**Tubeless tires** will be offered as optional equipment on new cars in 1954, for the first time since their introduction six years ago by Goodrich. Packard will put the tires, with white walls only, on its Patrician line, for an as yet unannounced premium price. The tires will be supplied at the start by Firestone, which is being sued by Goodrich on infringement-of-patent charges in the tubeless field.

**Together again:** John W. Harris is resuming an active role in Hegeman-Harris Co., New York construction firm. That's the meaning of the merger of Hegeman-Harris and John W. Harris Associates. Harris helped found Hegeman-Harris in 1917, but pulled out of active association in 1939.

**Continental Air Lines,** Rocky Mountain trunk line, will expand its Texas services if stockholders and the CAB approve its purchase of Pioneer Air Lines. Continental would put up 65,000 shares of its stock and cash said to be around \$600,000 for Pioneer's routes and some of its assets. Continental now has a 3,195-mi. system, Pioneer has 1,981 mi.

**U.S. nonmilitary exports** in October dropped 3% below the same month in 1952. Imports were off 11.3%.

**Oil:** For the sixth straight month purchasers of Texas crude have cut their requirements. Nominations to the Texas Railroad Commission for January were just over 2.9-million bbl. per day, down 1,236 bbl. from December. . . . The cut of 2¢ a gal. in the wholesale gasoline price is becoming general in the East and Gulf Coast area.

**Bulk cargoes** carried on the Great Lakes set a record 164-million tons for the season up to Dec. 1. The tonnage of iron ore, coal, and grain was 6.4% above the high set in 1942.

**Price ups and downs:** Prices on some 1954 freezers and refrigerators have been cut by Kelvinator division of Nash-Kelvinator Corp. But the company is boosting prices on some electric ranges.

*See what adhesives are doing today!*



*Photo Courtesy of Jefferson Electric Company*

## Keeping a secret—on time

Here, perhaps, is the most talked about clock of our time. It's the *Golden Hour Electric Clock*—a timepiece of mystery because its hands seem to keep time without the aid of moving parts.

Actually, the secret of its operation is 3M's! A 3M adhesive, EC-847, is used to secure the face of the clock to a stainless steel timing rim in the clock ring. This rim is geared to mesh with and turn the entire glass face, which in turn operates its intricate hand assembly.

In a mechanism such as this, you can readily appreciate the importance of a dependable bond between glass (clock face) and steel (motor gear). The very accuracy of the timepiece depends on it.

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# He's buying a toy . . .

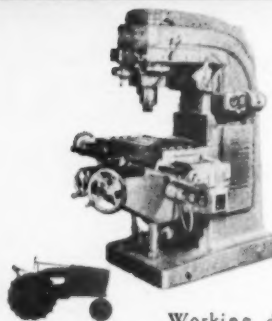


# he's helping to buy a machine tool — — —

**B**OYS, girls and the adults who care for them bought over \$400,000,000 worth of toys in 1952 . . . will spend a comparable amount for new toys in 1953. Yet few toy purchasers realize that a small part of the price of each toy sold makes new toys possible . . . helps to buy the *machine tools* that produce new equipment to make new toys.

And the same facts hold true when people buy home furnishings, clothing, automobiles, cigarettes, processed foods, and thousands of other items. Modern machine tools are always needed to produce the equipment that can make a new product, and to develop equipment that meets the demand for better ways of producing established products. Thus, a small part of today's price of any product must help buy tomorrow's machine tools.

In 55 years, Kearney & Trecker has produced more than 60,000 standard and special machine tools . . . to simplify methods and increase production for manufacturers . . . to make better products at lower cost for consumers. If you use machine tools, it will pay you to have Kearney & Trecker analyze *your* machining operations.



Working directly from blueprints the operator of a Kearney & Trecker Rotary Head Milling Machine reproduced a mold for a perfect scale model of a famous farm tractor. No models or templates were needed. This story of a tool, a toy and a mold typifies the amazing versatility of the rotary head method of milling. Fast, direct and accurate—it can reproduce geometric shapes in both horizontal and vertical planes. *Another example of how modern Kearney & Trecker machine tools pay off for manufacturers!*

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# WASHINGTON OUTLOOK

WASHINGTON  
BUREAU  
DEC. 19, 1953



There's rising optimism in Washington over the business outlook. Expectations are that the current easing-off will run on into 1954 (page 27). But there's less of the earlier feeling that we are headed for a sharp drop. So the Administration is showing more confidence as it puts next year's legislative program together. Here's the way Eisenhower's advisers are sizing things up:

- Business is still very good—much better than many forecasters expected a few months ago. The GOP has a good first year to boast of.

- Soft spots aren't snowballing. The downturns in some lines, while sharp, are largely offset by strength in others.

Officials see the slide as an inventory adjustment similar to that which started in the fall of 1949 and was pretty much over by mid-1950 when Korea started a new round of inflation. There will be nothing in Eisenhower's 1954 legislative program to indicate that a bust is feared.

Strong points will be played up in official statements. The hope is that they will keep the economic total high as one line after another goes through its adjustment.

Note the capital outlay by business in this quarter. Back in August, business told government it anticipated curtailments. But a new survey shows a fourth-quarter rate of \$28.3-billion, only slightly under the third-quarter rate. And the first quarter of 1954 should be at about the same pace.

The housing outlook for 1954 is firming up. Forecasts are for starts of about a million units.

Government spending also is firming up. The prospect is for no big cuts from the current fiscal year. Defense, the big buyer, will lay out about \$40-billion, only about \$3-billion less than during this fiscal year.

Some business stimulants are on the way, too, and will help cushion the adjustment as it rolls into 1954.

The Jan. 1 tax cuts will free big money.

And there may be other tax stimulants later. Treasury and Congress experts still haven't agreed on a revision bill. But the inclination of Congress is to give another \$1.5-billion to \$2-billion of relief in the form of revisions—cuts for both business and individuals.

A boost for home building and sales will be proposed. Eisenhower's advisory committee has come up with a program for easier financing.

Down-payment requirements would be reduced on FHA-insured financing, and the amortization period would run to 30 years. (Home buyers may hold back this spring until Congress acts on this.)

Public housing will be continued. But private capital will be lured to do part of the job.

A new type secondary mortgage market is a part of the housing program. Fanny Mae, the present government agency, would be replaced by a corporation, which ultimately would be privately owned.

There are other points in the housing program (page 32). The point, however, is that the Administration wants no slide in home building.

# WASHINGTON OUTLOOK (Continued)

WASHINGTON  
BUREAU  
DEC. 19, 1953

Farm price props will be renewed, too, in an effort to prevent a further loss in purchasing power and, incidentally, farm votes.

Benson will come up with some major revisions, such as use of the new parity formula (lower than at present) and two-price systems (page 32).

But Congress won't buy these. The best bet on the farm front is that Congress will keep the present farm program, with 90% supports backed up with production controls.

On the government's role in business: Watch for an important decision out of the Interior Dept. Heretofore, department policy has been to do basic research and then build large-scale demonstration projects in such fields as making synthetic fuels from coal or shale. Sec. McKay's new policy will be to limit the department to research, then let industry take over.

There's a retreat on Eisenhower electric power policy as it affects public-body customers and co-ops. These customers won't have to pay for reserving blocks of power to meet future needs. A decision to give private electric companies only short-term contracts means the government will withdraw power from them to meet co-op and public requirements.

Taft-Hartley: Any revision program offered by Eisenhower is sure to pick up unwanted amendments. The Supreme Court set the stage for two this week in labor decisions (page 158).

Bills to O.K. state regulation of picketing will be dusted off as a result of the decision in the teamster picketing case in Pennsylvania.

Exemption of retailers from Taft-Hartley also will be a hot issue. The NLRB is changing its rules to limit jurisdiction over local business. But many businessmen want to see it in the law, not just the regulations.

A Korean political settlement is stalemated, now that the Panmunjom talks have broken down. Renewal of fighting isn't likely, though.

Indo-China now is the No. 1 cold war danger spot. A serious Red offer of an armistice might be accepted by the French. This could clear the way for the Reds to take over by political conquest in a couple of years—unless the U. S. steps in with strong countermeasures.

Universal military training still isn't in sight. Congress simply doesn't like the idea. The prospect is that the draft will be extended from time to time, unless higher service pay meets military manpower needs of the future.

The big military change is two years away. That's the thing to remember in figuring what the new policy means to your business.

The 1955 fiscal budget won't show the pattern. It will still be a three-way split then—spending about equally divided between Army, Navy, and Air Force. The big change in that year will show in manpower. The Army and Navy will be losing strength relative to air.

Later budgets will tell the story. In fiscal 1956, the Air Force will get a much larger share of the money and will continue to become bigger from then on. Contracts for planes, guided missiles, and other air items will stay on the rise, while buying for the other services declines.

Here's how

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why

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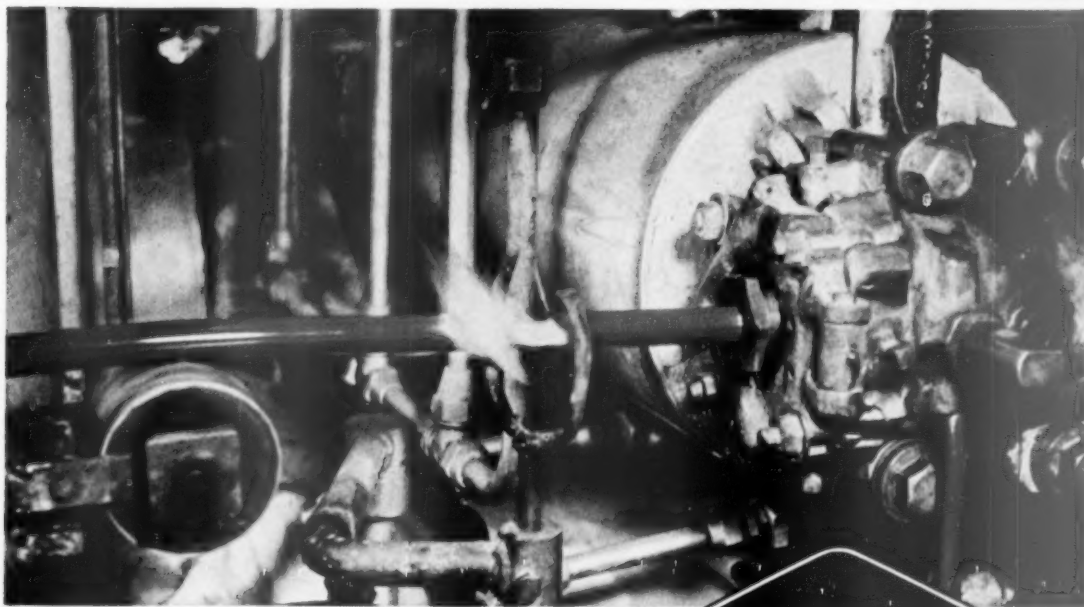
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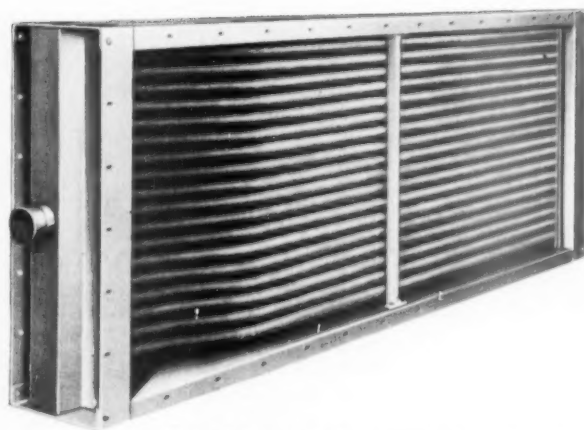
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# MARKETING

## Working All Year Just for One Day

That's the crazy lot of Joseph H. Ward, of Noma Lites, maker of Christmas lighting.

(Story continues on page 42)



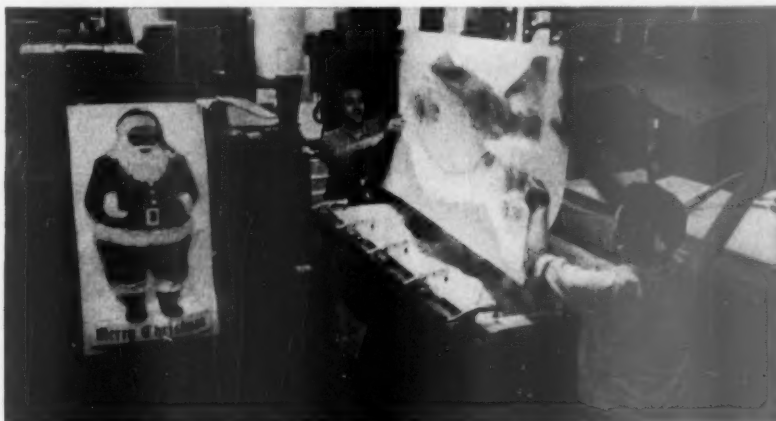
**DECEMBER:** "We've started planning next year's line."



Noma's vice-president, Abraham Wolf (right), starts ordering stock items such as wiring and sockets. Noma uses 85-million lamps a year in its sets. It also eats up miles of wire.



**FEBRUARY:** "We actually start production on Feb. 1."



Workers remove the front half of a 5-ft. plastic Santa from a vacuum mold. Noma introduces from 10 to 15 new specialty items every year. Electric lights figure in all of them.



**MARCH:** "The salesmen don't do anything half the year."



The official sales season opens with the Toy Show in March. Ward, who goes on the road himself, here shows item 32R—a Red Rope-Twist Translucent Outdoor Plastic Candle.

# Christmas Lights: Shortest Season of



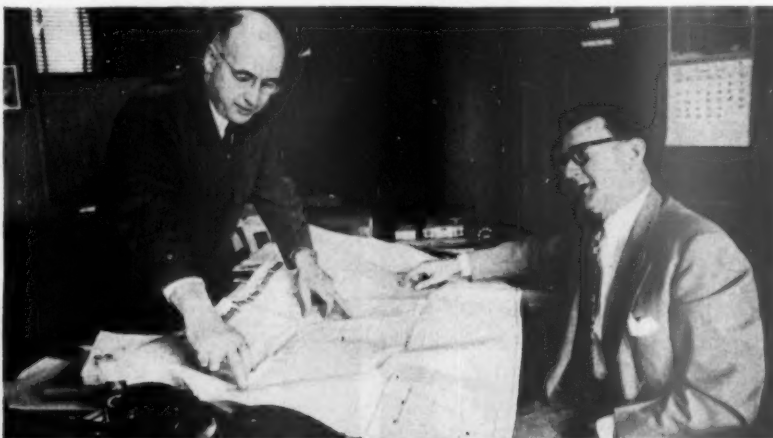
**JUNE:** "Financing is a headache for us —all the time."



Inventory starts piling up around June. "If I showed you all the stuff we have in June, 'Holy smoke,' you'd say, 'where'll you put it all?'" Only a few clients order this early.



**AUGUST:** "In August we start looking for warehouse space."



Ad manager H. J. Williams helps Ward pick locations that will give clients fast service. This year Noma spotted 13 temporary warehouses around the country.



**DECEMBER:** "Now they say we're too conservative."



Things are popping around Noma. Ward spends half his time on the phone taking orders. "The bankers say we're doing too much business for the money we've borrowed."

## All (Story starts on page 41)

Among seasonal industries, the Christmas decorative light business can lay claim to the distinction of having the briefest season of all.

"You work all year for just one day," says Joseph H. Ward (cover), president of Noma Lites, Inc., the biggest factor in the Christmas lighting industry. "It's a business with a single turnover of stock."

The riskiest part of the business, according to Ward, is financing:

"You have to finance the whole year on a few weeks of selling. You start manufacturing in February. If you're lucky, some accounts will give you a big break. They'll say, 'Sure, ship the stuff to us in August and we'll pay you in December.' Or maybe they'll get around to it in January."

• **Only One Shot**—Potential difficulty always overhangs this business based on the joyous Yuletide. There's the weather, for one thing. It might be too warm in one part of the country around Christmastime, while another part is having blizzards. In one case people won't buy Christmas lights; in the other, they can't. Or perhaps Noma figures all wrong on the market. It makes too many or too few of a certain item when it tries to outguess the market a year beforehand. Or maybe the trucks coming east from the company's main manufacturing plant in St. Joseph, Mo., at the height of the selling season, are simply delayed.

It's all for that one day; and once the sale is lost, it's lost for a whole year. That's why the day after Christmas is almost as important to Noma as Christmas itself. On Dec. 26 the company starts its annual check of inventory left in dealers' and jobbers' hands. Until it knows this crucial figure it can't plan realistically for next year's manufacturing runs.

This helps to explain the wide swings of Noma's business. As of June 30, 1952, for example, it held an inventory of \$6.3-million—a figure that rose steadily for the rest of the year. (Sales were about \$11.5-million.) As of Jan. 31, 1953, it held an inventory of \$2.8-million.

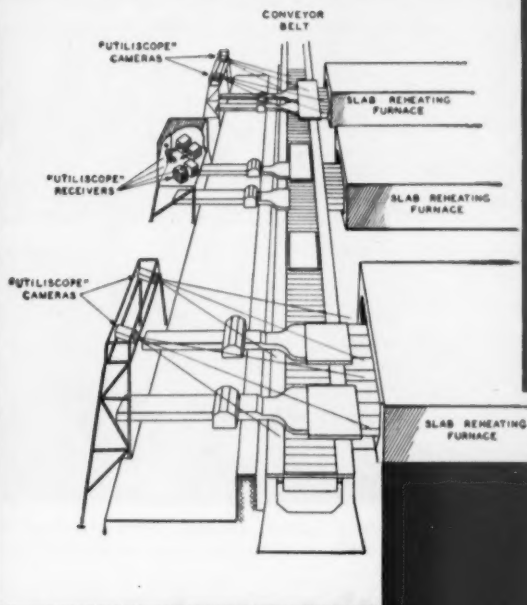
• **Friends**—But despite everything, Father Christmas has been good to Noma; and Noma—aside from some occasional wandering into new fields—has shown its gratitude by sticking to Christmas.

This year, Ward estimates, Noma Lites will have an over-all volume of about \$16.5-million—a gain of 32% over 1952. That gives it, he says, about

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# Osborn Brushes

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35% of the total U.S. market for Christmas lighting.

• **Catalog**—In all, the company makes some 200 items, ranging in price (to to consumer) from 69¢ to \$60. The list starts with the familiar strings of Christmas tree lights (called "outfits" in the trade) and goes on through 5-ft. plastic Santa Clauses, churches with Swiss music boxes inside, "talking" stations for model railroads, Christmas tree stands, wreaths, plastic candles. Leafing through Noma's catalog, you come upon such strange and festive items as No. 701—described as Angel-Lite with Star Wand. Or No. 91, 30-in. Illuminated Full Color Vinylite Plastic Sno-Man. Or No. 204, 9-Light • **Plastic Multiple Candelier.**

Noma has some innovations to its credit. Its most renowned during the past few years has been Bubble-Lites, those liquid-filled glass tubes that send a stream of bubbles upward as long as the light is on.

Only one criterion governs Noma's decision to make or not to make: If it's for Christmas and you can put an electric lamp inside it, on top of it, under it, or behind it, chances are that Noma is making it.

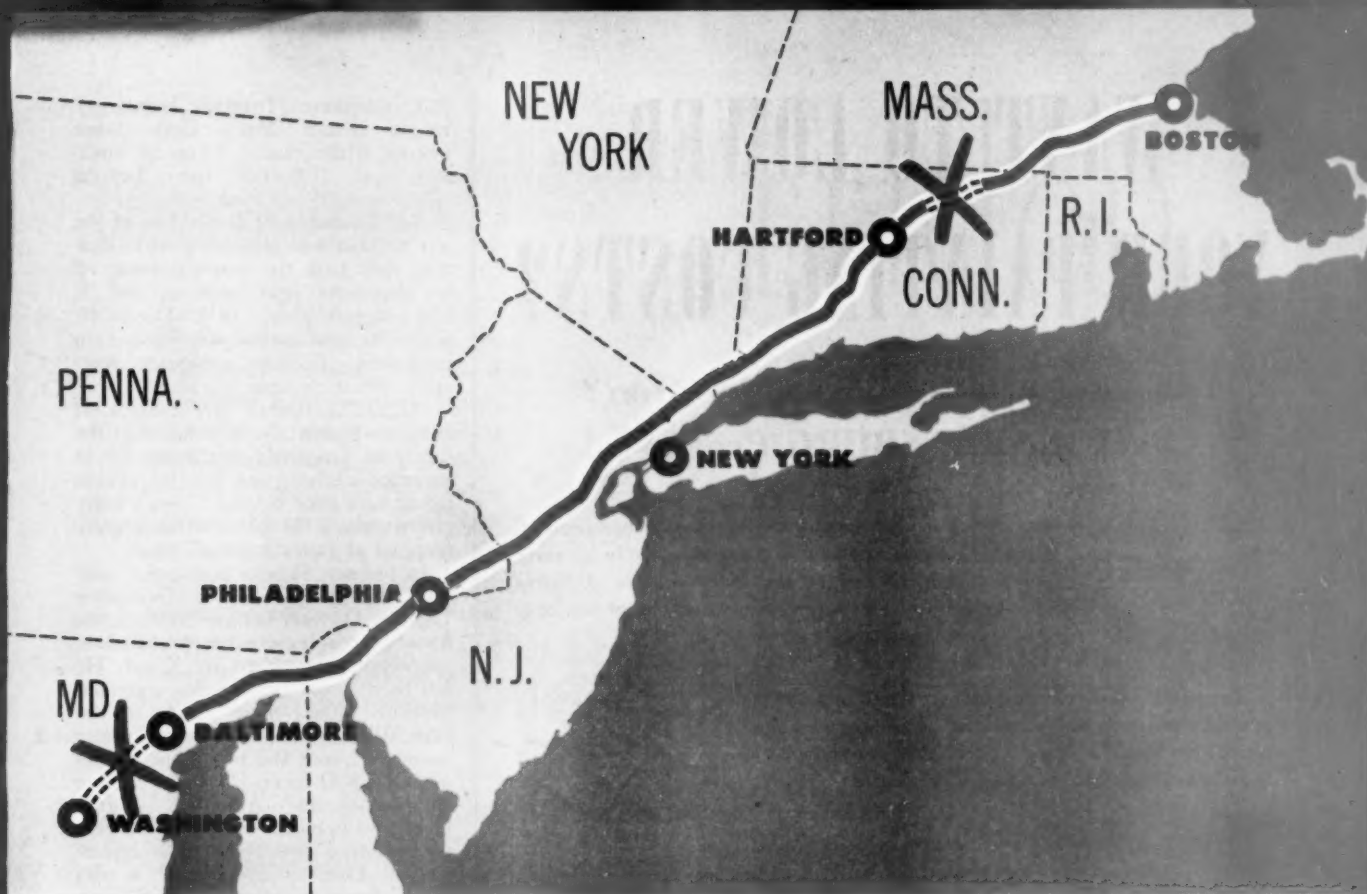
Noma is both an assembler of parts and a manufacturer. It buys the wire, bulbs (from General Electric and Westinghouse), and other parts for the outfits, makes its own plastic items.

• **Plenty for All**—Noma today has its competitors, altogether about 40 of them. In its halcyon days, however, Noma was like the rich kid on the block who gets all the Christmas presents. Simply, Noma had almost all the business—a monopoly it still holds in Britain through a subsidiary.

But the Noma people console themselves by pointing out that today there's enough business to take care of everybody. The decorative light business comes to about \$90-million a year at retail, Ward estimates. That, he remarks, is about the same annual volume produced by laundry irons, more than dishwashers produced last year.

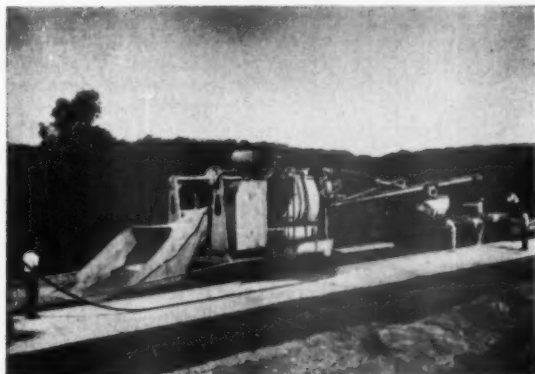
• **Expansion**—The history of Noma goes back to 1925, when 14 makers joined together to form the National Outfit Manufacturers Assn. One of the chief architects of this structure was Henri Sadacca, who had been in the Christmas light business since 1911, when you lit your tree up with dry batteries. Sadacca has led Noma Electric Corp., as it was known until recently, through some interesting years.

The big burst of energy came after 1942, when Sadacca started to pick up one company after another. Before his acquisitions halted, Sadacca had put Noma into the wire and cable business (Ansonia Electrical Co.), fireworks



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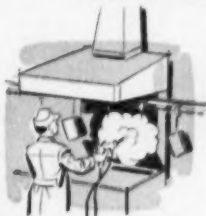
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and munitions (Triumph Industries), ranges (Estate Stove Co.), home freezers (Refrigeration Corp. of America), dolls (Effanbee, Inc.), heating equipment (Ward Heater Co.).

• **And Contraction**—By the end of the war Sadacca had achieved a diversification that took the seasonal curse off his decorative light business, and he had bigger plans (BW—Dec. 28 '48, p56). He was on his way toward an integrated, full-line appliance company. What changed his plans?

"Changing times," says Sadacca. It became apparent, he explains, that the future of household appliances lay in packaged kitchens; and this, he reasons, would have been beyond Noma's financial resources. So he sold his acquisitions off at "advantageous" prices.

In January, Sadacca arranged a spin-off, whereby the former Decorative Lighting Division became Noma Lites, Inc. Sadacca became board chairman, appointed as president Joe Ward. He has been in the business for years and probably knows more people in the trade than anyone but Sadacca. Sadacca meanwhile took the two properties remaining—K-D Lamp Co. (auto lighting equipment) and Automatic Burner Corp. (oil burners)—and bundled them into another new concern, Northeast Capital Corp., of which he is also board chairman.

What will happen now remains to be seen. Sadacca is looking around. Noma is experimenting with air conditioning and radio clocks under the Noma label. Sadacca underlines the experimental nature of these efforts. Noma has just one interest—Christmas.

• **The Big Day**—Noma looks on its market as practically all the 44-million households in the country. U. S. homes have a huge appetite for decorative lighting. Even in mediocre years for the industry, they use up around 175-million Christmas lamps a year; in good years they buy more than 300-million.

Almost everybody gets into the distribution of decorative lighting. It is carried by almost every conceivable type of retail outlet from variety and department stores to drugstores and supermarkets. Noma has no less than 4,000 accounts. The big majority are jobbers that sell to retailers; the rest are big chains and others that buy direct.

• **Trends**—Ward and his people are as happy over the future as they are over the present. They see some emerging trends that spell continuing good times for the decorative lighting business.

They note the population trend to the suburbs, the high rate of family formation since the war, the bumper crop of babies. To Noma, all this means more houses to light up at Christmas, more children to provide a reason for doing it.

Furthermore, Ward approves heartily

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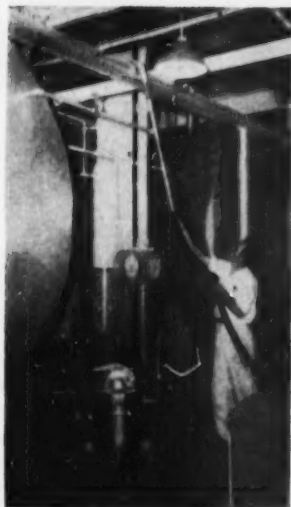
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**Announcement** For scientists, research workers and technicians in certain specialized fields, the Friden organization has now created a unique calculator that provides *fully automatic extraction of square root* in addition to all the other "decision-making" features of the Friden. Automatically, with the touch of one key, this machine extracts the square root of any number up to 10 digits. Up to 100 operations formerly required on any desk calculator are eliminated.

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of another trend—a tendency to use more and more outdoor as well as indoor lighting. Today, about 25% of the lighting sold is used outdoors. The percentage is growing, swelled by all those new suburban homeowners and by the huge development in shopping centers.

Ward is thankful, too, for the innate competitiveness of the American people. They try to keep up with their neighbors even when it comes to observing Christmas.

"I'll tell you how it happens," says Ward. "I overheard a conversation on a train that's typical. The couple behind me had just gotten married and had bought a house in an established community where everybody had his lighting already. They couldn't afford much this year themselves, but they didn't want to look like pikers. So they figured out a plan to spend about \$25 a year on lights."

• **Plastics**—Noma has the decorations to meet this growing market, thanks to plastics. The spread of the market has been immensely helped by the development of still another trend in the industry, the use of vacuum molding for plastics. This is a much cheaper way to produce plastic items, particularly large ones, than injection molding. The big saving comes in the molds themselves, which are made of plaster. The cost is a few hundred dollars for, say, a big Santa (pictures, page 41)—as against about \$60,000 for a machined injection mold.

This means that Noma can bring out more new models every year than it once could. Actually, Noma begins the design work for the new products months beforehand. Its designers started shaping up the 1954 line as long ago as last summer.

• **Long Guess**—Planning so far ahead is tough. Noma's estimates for the future market are based largely on various rules of thumb—based, in turn, on years of experience. If it figures short, it can change its schedules up to Oct. 1. "After that," says Ward, "we're sunk."

Perhaps even tougher than the months of forward planning are the last few weeks before Christmas. That's when things get really hectic, when people out at the factory in St. Joseph work so late that they sleep in the plant on cots, when everybody in the world is calling Noma for merchandise.

Ward himself can't get off the phone. Either he's telling Philadelphia to check Atlanta or Detroit about some item in short supply, or he's writing down a telephone order from a dealer who refuses to do business with anyone else.

But two weeks before Christmas it's doubtful that anybody, even Ward, can scrounge a No. 532W-28-Light White Christmas Tree—for anyone.



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# For Men Only: Parties Lure



**NEIMAN-MARCUS** opened its men's night Christmas party only to invited guests—there

was no publicity, and no photographers were allowed. Prestige mattered more than sales. The store has had parties since 1935.



**A. HARRIS,** just two blocks away, promoted its first men's night show heavily, pulled in 7,000 men on

the same night as Neiman-Marcus. Sales force was swamped. Men liked the entertainment and refreshments (pictures, opposite).

# Them In

The men of Dallas were doubly blessed last Tuesday evening. They had their pick of two free parties—at which two big Dallas stores played host. The fact that both Neiman-Marcus and A. Harris & Co. department store were putting on a men's night is significant testimony to the growing regard stores have for male customers (BW—Apr. 5 '52, p.36).

At A. Harris, some 7,000 men jostled happily through the store (pictures, page 50, bottom, and page 51). They were on their own; no women were around to hamper with backseat shopping advice. They goggled while pretty girls modeled. They listened to band music, made away with vast amounts of cookies, sherbet, coffee, and soft drinks. Lucky ones walked off with door prizes.

Meanwhile, a smaller, select group of 850 invited guests watched a fancy floor show at Neiman-Marcus (top picture, page 50) two blocks down the street. They, too, watched models parade, drank Scotch and bourbon.

For Neiman-Marcus, the Christmas stag party is an old story; it has had one every year since 1935. For A. Harris it was a first venture. It was pure coincidence, A. Harris said, that it picked the same night for its show.

• **Shopping in a Chair**—There's no doubt about it; the pampered male gets some extra pampering at Christmas.

It may take the form of a men's night. Or it may shape up as a men's "club"—open from around Thanksgiving to Christmas Eve. Either way, he can do his Christmas shopping lounging in a club chair, with a cup of coffee or a cocktail glass in hand, while store employees scurry around to find the sizes and colors he fancies.

• **Downtown and Suburbs**—Gala affairs such as Neiman-Marcus' and A. Harris' parties are by no means common. But the idea is growing. Saks Fifth Avenue in San Francisco threw its second big cocktail party for men this year. Woodward & Lothrop in Washington, D. C., is also in its second year of playing host to men. Battelstein's, Inc., in Houston gave a party this Christmas for the first time in a suburban branch in the River Oaks section. Coulter's in Los Angeles hopes to have one in a year or so.

The parties, in fact, aren't limited to downtown. Two Detroit suburbs—Grosse Pointe and Birmingham—put on a community jamboree in which the retailers band together. In Birmingham 18 merchants were in it last year; this year, 85. In Aurora, near Chicago, 60 stores take part. Frank R. Jelleff's ready-to-wear store in Washington has a special men's night in its branch store.

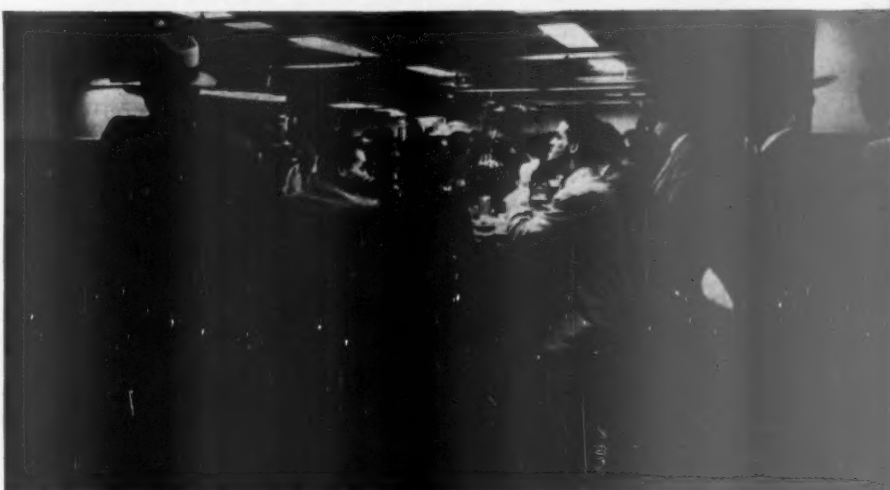
• **Two Types**—The parties follow a



**MUSIC** A. Harris guests had choice of bands to listen to and to put them in the right holiday spirit to do their Christmas shopping.

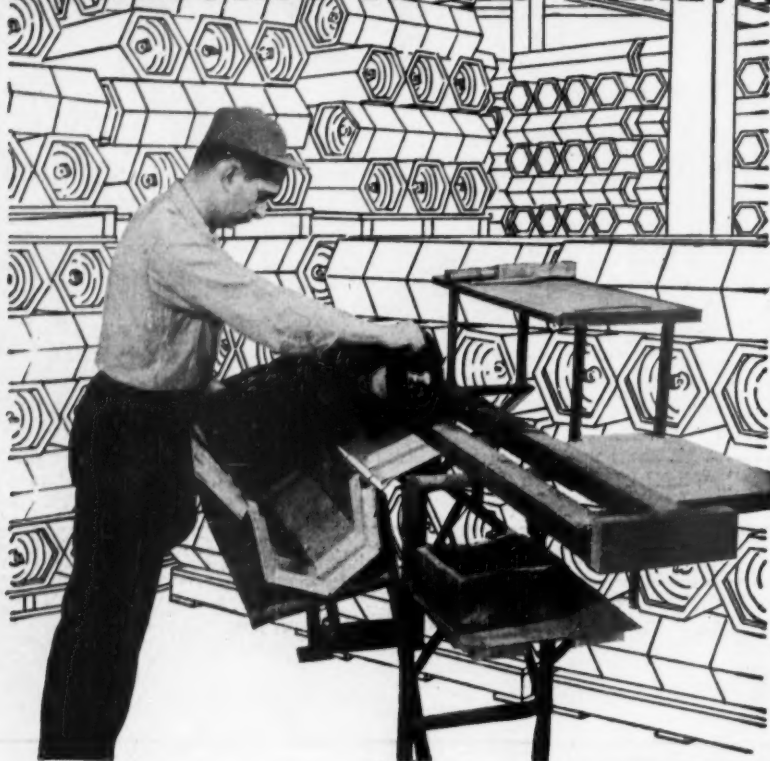


**MODELS** in glittering finery paraded before men, who bought like mad. The girls modeled everything from mink capes to lingerie.



**FOOD** Harris guests drank 1,000 cups of coffee, soft drinks by the case, ate vast amounts of cookies and sherbet—all on the house.

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variety of patterns. The difference between the Neiman-Marcus and the A. Harris affair represents two general approaches to the idea.

At A. Harris everyone in pants was welcome. The shindig had been publicized through press releases and advertising. Door prizes were lavish; refreshments abundant, but simple.

It took an invitation to get inside Neiman-Marcus' doors. Said Warren Leslie, who ran the store's show, "It is a private party we throw for our best customers. It is our way of telling them thank you for paying their wives' bills." And there were no door prizes—just good entertainment and plenty of liquor.

Both techniques sell. At Neiman-Marcus, which wasn't out to sell, the men bought several mink coats as well as plenty of less magnificent gift items. A. Harris, with a full sales force on deck, reported itself swamped.

• **Drawbacks**—All stores having such a men's night observe certain precautions. At parties the gala atmosphere can become too gala. Men mellowed by cocktails may buy too enthusiastically; that means a load of returned goods later. For that reason, some stores keep sales pressure low, stress the fun and frolic, and count on the sales to come in later. Others offer only soft drinks.

One or two disillusioned merchants have dropped the idea altogether. Sako-witz Bros. in Houston has had parties the last two years. They were by invitation because the store figured it couldn't handle all its men customers. The 1,200 who turned up liked it fine, but the uninvited ones were disgruntled. Results: more bad will than good.

• **Preferred**—So far the club idea has taken more hold than the one-night affair.

E. T. Slattery Co. in Boston stakes a claim to being the first women's store to promote the male sex. It started its Ball & Chain club 26 years ago.

The club approach keeps the customers coming. Slattery tells of a Boston judge who every Christmas goes to the club—on the store's main floor—to pick out a hat for his wife. Never once has the hat bounced.

Bonwit Teller is another experienced hand at the club game. It's 721 Club (named for the New York store's Fifth Avenue address) operates also in Cleveland, and San Francisco.

The New York Bonwit's does this stunt up York.

The only women are the store personnel, and the service is elaborate. One man comes in every year, gets himself a table in a corner, with a telephone handy. He spends the day there, buying with one hand, dictating letters or making business deals over the phone with the other.



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Selected to fire some of the world's largest and most efficient boilers—the Cyclone Furnace offers down-the-line operating savings to utility and industrial steam plants. Through simplification of the entire process of coal preparation, combustion, ash segregation, and ash handling, the Cyclone makes possible economies in initial cost, operating labor, fuel consumption, and maintenance.

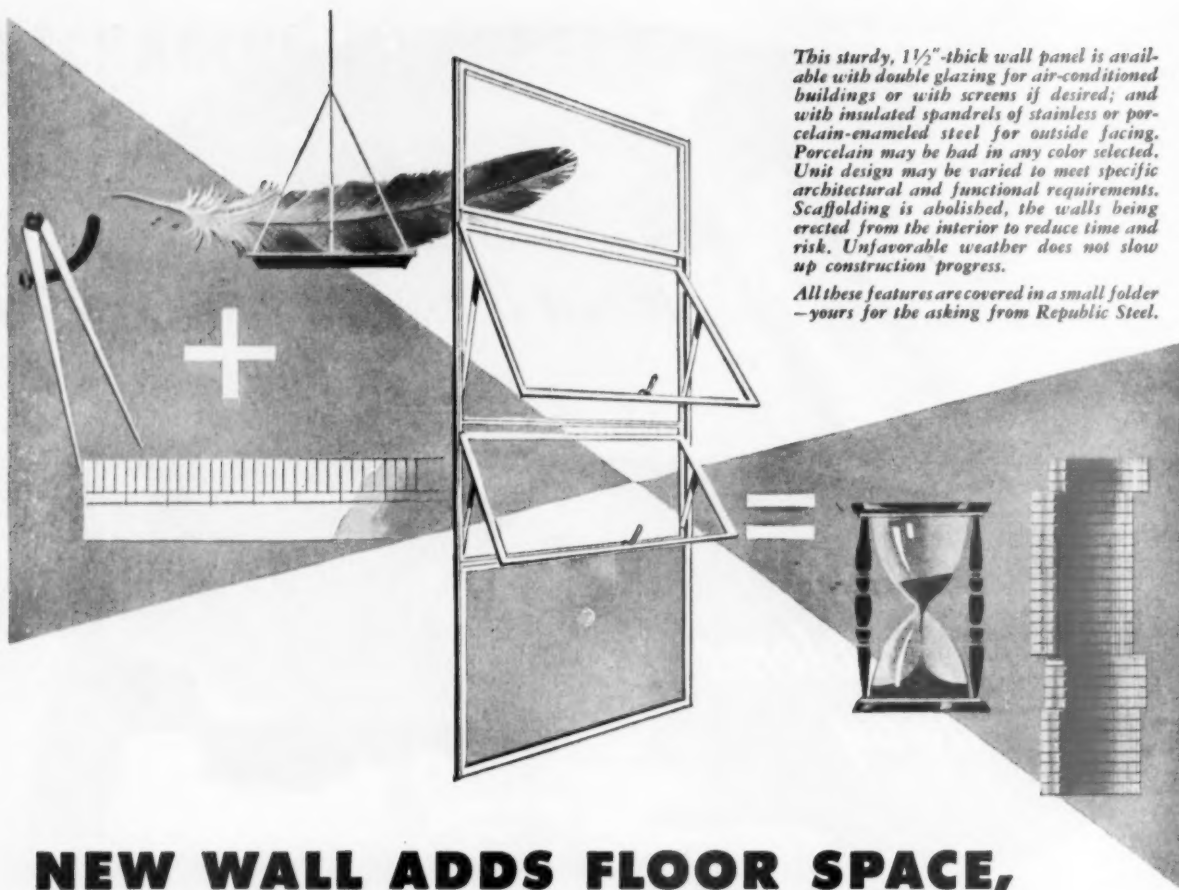
Cyclone-fired units thrive on a wide range of coals . . . do not bottleneck your plant operations when only poorer grades of coal are available. Cyclones burn crushed, not pulverized coal, and they burn it more completely. The turbulent action of the B&W Cyclone Furnace extracts—with less air—the maximum amount of heat from every bit of fuel, thus reducing both the amount of unburned carbon in the ash and the amount of heat-laden gas escaping up the stack. Cyclones with provision for firing oil and gas as well as coal can be switched from fuel to fuel very quickly without changes to firing equipment.

These are some of the dollars-and-cents benefits being enjoyed by owners of the many Cyclone-Furnace-fired boilers in operation—under a great variety of conditions—in different parts of the country. Based on this intensive, long-range experience, we will be pleased to discuss with you the advantages the Cyclone Furnace offers.



BOILER  
DIVISION

N-145



*This sturdy, 1½"-thick wall panel is available with double glazing for air-conditioned buildings or with screens if desired; and with insulated spandrels of stainless or porcelain-enameled steel for outside facing. Porcelain may be had in any color selected. Unit design may be varied to meet specific architectural and functional requirements. Scaffolding is abolished, the walls being erected from the interior to reduce time and risk. Unfavorable weather does not slow up construction progress.*

*All these features are covered in a small folder—yours for the asking from Republic Steel.*

## NEW WALL ADDS FLOOR SPACE, REDUCES WEIGHT AND COST

### ***Its earning ability is tempting to businessmen***

Walls contribute to earning power of a building. Any new type of wall construction which reduces over-all building cost is an investment to look into.

The Vision-Vent wall panel is a development by our Truscon Division which shows economy over conventional masonry wall costs. It combines window and spandrel. The spandrel is a steel sandwich with insulation.

The ingeniousness lies mainly in the insulation, which enables this 1½"-wall to replace an ordinary 12"-wall. The difference in thickness can be picked up as additional floor space. The complete unit weighs about seven and a half pounds per square foot; a similar wall with masonry, about 24 pounds. The weight differential offers further saving in the design of supporting columns.

### ***Its development justifies a business risk***

The many other features of the Vision-Vent are given above. If you want to know more we will be glad to send a folder. We draw your attention to the Vision-Vent here as typical of Republic Steel's approach to new products. The development of the Vision-Vent was undertaken by

request with no assurance whatsoever of a contract. The Vision-Vent justified the risk, however, and Republic's initial order covered the window wall units for a chain of hospitals. The panels are equally advantageous for other types of construction from schools to skyscrapers.

# REPUBLIC STEEL

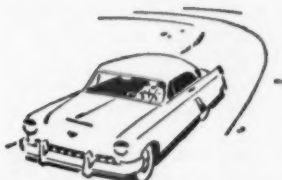


WORLD'S WIDEST RANGE  
OF STANDARD STEELS  
AND STEEL PRODUCTS



Thousands of steels and steel products now bear the Republic name.

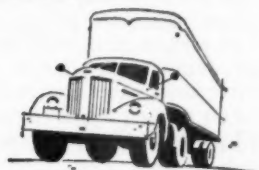
Do you know these?



**REPUBLIC ALLOY STEELS**—A complete range of all commercial grades is manufactured by the world's largest producer of alloy and stainless steels. For best results in alloy steel application, processing and use, Republic offers its exclusive "3-Dimension Metallurgical Service."



**STEEL FILING CABINETS**—Part of the complete line of steel office equipment fabricated by Republic's Berger Manufacturing Division. Companion equipment includes steel desks and tables, storage cabinets, transfer cases, wardrobes, book shelves and plan drawer assemblies.



**REPUBLIC WIDE STEEL SHEETS**—Hot rolled and cold rolled steel sheets up to 90-inches wide offer important fabricating economies and production advantages by eliminating the need for welded seams in a variety of larger area product applications.

\* \* \*

## Republic Steel Today:

ore mines here and abroad; lake and ocean-going ships; coal mines; furnaces and huge steel mills, North and South; steel fabricating plants across the Nation and in Canada; sales offices in principal cities; PLUS 70,000 men and women working together to produce steels and steel products to help build and protect a stronger America. Republic Steel Corporation, General Offices, Cleveland 1, Ohio.

# More Trouble for Cigarettes

The dentists hear the strongest words yet on cigarettes and lung cancer . . . Pinball machines get a setback in a federal court . . . Sears discovers the spare-time farmer.

The fire lit under the cigarette industry by the medical profession's findings about lung cancer (BW—Dec. 5 '53, p24) got hotter last week.

In Manhattan, 15,000 dentists at the Greater New York Dental Meeting heard two of the country's foremost researchers in the field reiterate their charges against cigarettes.

Dr. Ernest L. Wynder, of Memorial Center for Cancer and Allied Diseases, reviewed the results of 13 independent studies here and abroad, all of which concur substantially with his own findings. In Wynder's test, his staff interviewed 1,000 lung cancer patients, found only 15 who were nonsmokers. But a matched sample of nonsufferers turned up 150 nonsmokers.

Dr. Wynder also reported on his studies involving the production of cancer of the skin in mice by using cigarette smoke condensate. Purpose of the study is to identify the factors in smoke causing the cancer.

Dr. Alton Ochsner, chairman of the surgery department at Tulane University's School of Medicine, offered the hair-raising prophecy that "20 years hence, cancer of the lung will represent approximately 18% of all cancer. Since cancer of the lung is more common in men than in women, our prediction is that in 1970, one out of every two or three men with cancer will have a cancer of the lung, and that one out of every 10 or 15 men living in the United States will have a cancer of the lung."

• **Further Moves**—Other developments along the cigarette front last week:

• P. Lorillard Co. came through with an official statement on the problem that echoed the position taken earlier by American Tobacco Co. The gist: Charge is unproven.

• Cigarette stock, hit by the original news stories several weeks ago, rallied a little last week but not enough to help much.

• The Better Business Bureau issued a list of standards to cure the abuses in cigarette advertising. Among them is the recommendation that cigarette makers stop advertising that "cigarette smoking cannot or will not cause harmful effects."

## Tilt, Says Court

The multimillion-dollar pinball industry received a severe jolt this week

in Nashville, Tenn. A federal court handed down a ruling that would put a pinball machine in the same category as a slot machine if a player gets a cash payoff.

At present, pinball machines are classified as an amusement device and taxed \$10 yearly by the federal government. But paying off players in nickels, which the court says some operators do, would subject machines to a \$250-a-year gaming tax.

Pinball machine owners and operators fear they'll lose business if they cut out the payoffs. One spokesman said the public "won't spend their nickels just to see flashing lights." The owners claim that thousands of eating and drinking establishments depend on income from these machines.

On the other hand, industry representatives feel that paying the \$250 gaming tax would subject operators to local gaming charges as it did last year with purchasers of the federal gambling tax stamp. Attorneys for the pinball machine owners involved in the case said they would appeal the Nashville decision.

## Sears Woos Sundowners

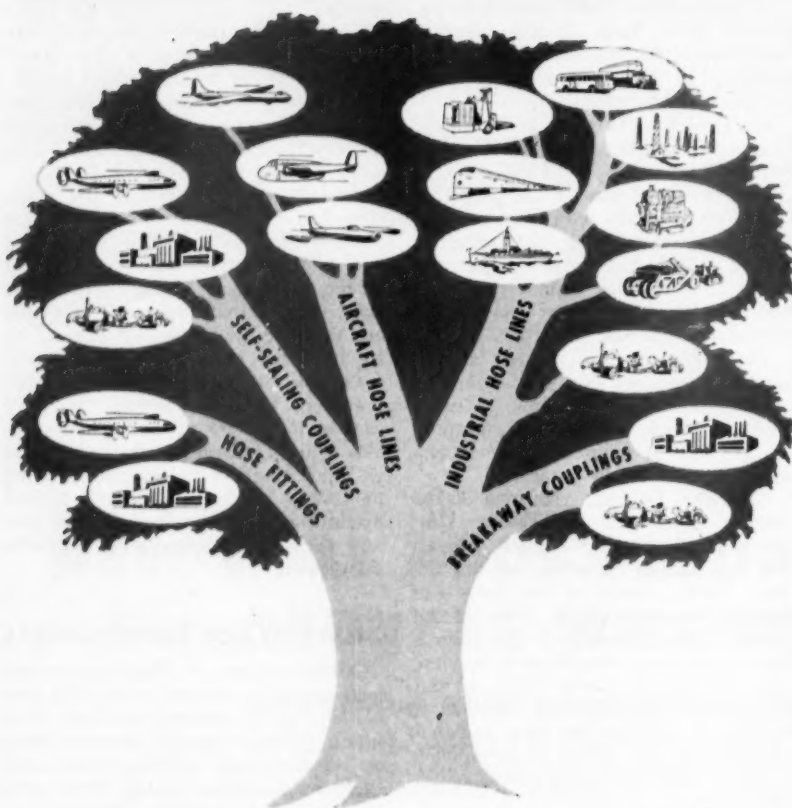
Manufacturers of farm equipment have gradually become aware of a new market that is growing up under their noses. It's made up of "sundown farmers"—factory and office workers and their families who farm in their spare time to supplement their incomes.

It's a big, but only partially evaluated, market in this new era of the leisured masses (BW—Sep. 12 '53, p142; Sep. 19 '53, p144). According to the Census Bureau, it numbers perhaps 2-million families. But so far, manufacturers have been slow to crack this low-income market with high-priced equipment.

This week, Sears, Roebuck & Co. made its latest and most spectacular bid for business in this growing market. The bait: a three-wheeled riding tractor specifically designed for the 3- to 30-acre farm. It sells for about half the price of the conventional tractor.

• **Tests**—In its efforts to get the jump in this new market, Sears has been doing its own guinea-pigging. Since late last spring, the company's farm researchers have operated a simulated sundown farm at its big experimental farm near Plano, Ill., 50 miles west of Chicago. The sundown farm got off

# GROWING GROWING GROWING



Over a decade ago, as a "seedling" organization, Aeroquip introduced a new type Flexible Hose Line for military aircraft. By constantly anticipating the needs of this dynamic industry through the years, Aeroquip continued to develop new and improved hose lines that set the pace for aircraft standards.

At the end of World War II, Aeroquip was ready to serve additional markets with newly developed products. The "Aeroquip Idea" of making hose lines from bulk hose and detachable, reusable fittings, matched for guaranteed performance, flourished in dozens of major industries and in the important farm market. Today, as the world's leading producer of hose lines for aircraft and industrial applications, Aeroquip has spread its roots deeply into America's industrial soil . . . and Aeroquip is still growing!

## Aeroquip

**AEROQUIP CORPORATION • JACKSON, MICHIGAN**  
FLEXIBLE HOSE LINES • DETACHABLE, REUSABLE FITTINGS • SELF-SEALING  
COUPLINGS • BREAKAWAY COUPLINGS • HYDRAULISCOPE

to a late seasonal start; its poultry and few head of livestock actually were in production less than six months. Yet from 12 acres, four-and-a-half of them planted to truck crops and the rest given over to pasture and farm yard, a total income of \$2,194 was realized. Given a full season, Sears experts say, the amount could have been doubled.

• **Multipurpose**—Sears' new offering, which it calls the Tri-Trac, can do just about anything its bigger and more expensive counterpart can do, the company claims. With its 12 specially designed attachments, the tractor can plow, plant, cultivate, cut, and rake grass-type crops. It also has attachments for plowing snow, bulldozing, and mowing lawns.

Resembling nothing on the market today, Sears says, the Tri-Trac embodies engineering and design features worked out in five years of research. For instance, there's three-wheel steering. The steering gear turns the front wheels in one direction while twisting the rear power wheel slightly in the opposite direction. This swivel hip action gives a tight, 8-ft. turning radius. A separate worm gear also permits the operator to adjust the direction of the rear wheel independently to prevent "drift" in hilly country. The speed range is 21 mph. to 4½ mph. David Bradley Mfg. Works, a subsidiary of Sears, makes the tractor. Price of the power unit is \$598 f.o.b. factory. Attachments are sold separately.

• **Filling the Gap**—Sears has been making so-called garden-type tractors since 1932. They are two-wheeled power units that pull attachments and are guided by the operator, who walks behind. These are satisfactory for garden plots of up to perhaps three acres. But the sundown farmer, with his 3 to 30 acres of tillable land, either had to use one of these or go to a small conventional tractor priced in the \$1,000 class, without attachments. The Tri-Trac fills the gap between these two, Sears says.

• **Built-In Distribution**—Sears attributes the emergence of the sundown farmer as an economic factor to several interlocking trends. Besides the ever-shortening workday and week, industry is expanding into smaller communities—bringing more families to suburbs and outlying metropolitan satellite towns.

Company optimism also is backed by census figures. These show that the number of farms under 50 acres is growing—in the face of the fact that the average size of all farms is increasing. And Sears feels that its distribution system is strategically located to capitalize on this growing market—not only with the Tri-Trac, but with all the other equipment developed for the sundown farmer, from poultry breeders to hog feeders.



Bank of America, with 538 branches in 330 California communities, is the world's largest privately owned bank. Its shares are held by 220,000 stockholders residing in every one of the 48 states. Resources (as of June 30, 1953): \$8,017,573,360.34.

## Boosting your sales curve in California!

Do you have a stake in the California retail market? If so, then you also have a direct interest in Bank of America's Christmas Club savings plan. This year, at the peak of the holiday season, this plan will release more than 36 million dollars to thousands of special, thrifty depositors. Most of this money is spent in Christmas buying—for furniture, automobiles, home appliances, clothing, toys. This is banking that is *boosting your sales curve in California*. It is banking that is ***Building California...Serving You!***

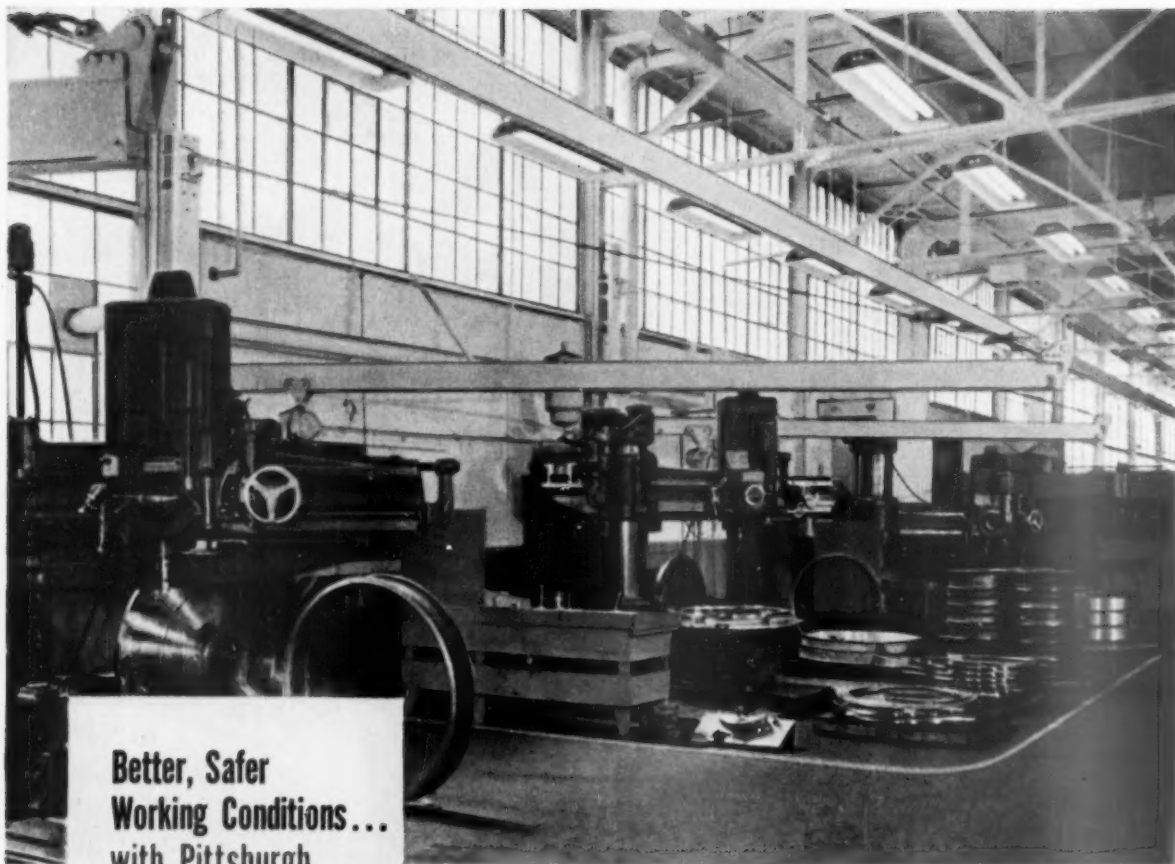
**Bank of America**  
NATIONAL TRUST AND SAVINGS ASSOCIATION

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Bank of America has main offices in the two Reserve cities of California, San Francisco and Los Angeles. Overseas branches: London, Manila, Tokyo, Yokohama, Kobe, Osaka, Bangkok, Guam. Representatives: New York, Mexico City, Milan, Paris and Zurich. Correspondents throughout the world. Bank of America (International), New York, a wholly owned subsidiary; overseas branch, Duesseldorf.

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## Better, Safer Working Conditions... with Pittsburgh COLOR DYNAMICS\*

Choice of right colors for  
walls, ceilings and machines  
improves workers' morale,  
reduces housekeeping and  
accident hazards in modern  
plant of largest manufacturer  
of pneumatic clutches  
and brakes.



Fawick Airflex Division, Federal Fawick Corporation plant in Cleveland, Ohio, looks clean, bright and pleasant three years after being painted according to COLOR DYNAMICS.

**T**HE THREE-YEAR experience of Fawick Airflex with Pittsburgh COLOR DYNAMICS adds convincing proof that wise and careful use of color is a profitable investment that benefits both management and workers.

● The Fawick Airflex Division of the Federal Fawick Corporation is the largest manufacturer of pneumatic clutches and brakes for all types of industrial machinery.

● This plant was painted according to COLOR DYNAMICS early in the summer of 1950. Morale-building colors with high light reflectance were used on ceilings and upper walls, making the entire work area brighter and more cheerful. Eye-rest colors were used on lower walls to lessen eye fatigue. The machinery was painted with focal and eye-rest colors

to permit the operator to see his job better. Safety colors were applied on operating controls, mobile equipment and traffic lanes to increase safety.

● No better summary of the satisfactory results that were achieved can be made than this comment by R. S. Huxtable, President of the Federal Fawick Corporation:

● "COLOR DYNAMICS has raised efficiency and productivity in our plant. Also, we are certain that the improvement in morale and in our relations with the working force has fully justified our selection of COLOR DYNAMICS. Being proud of their pleasant surroundings, our employees help to keep their work areas clean. This simplifies housekeeping. Moreover, we have been most pleased with the way Pittsburgh Paints have held up."

### Get a FREE Color Engineering Study of Your Plant!

● Painting your plant according to COLOR DYNAMICS costs no more than a conventional maintenance job. Why not investigate what this modern system of putting color to work will do in your factory or office? Send for our free book which explains what

COLOR DYNAMICS is and how it works. Better still, call your nearest Pittsburgh Plate Glass Company branch and ask to have a representative give you a color engineering study of your plant, or any part of it, without cost or obligation. Or mail this coupon.

### SEND FOR THIS FREE BOOK!

Pittsburgh Plate Glass Co., Paint Div.  
Department BW-123, Pittsburgh 22, Pa.  
☐ Please send me a FREE copy of your booklet "Color Dynamics."  
☐ Please have your representative call for a Color Dynamics Survey without obligation on our part.



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# PITTSBURGH PAINTS

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

Copyright 1953, Pittsburgh Plate Glass Co., Pittsburgh, Pa.

## MARKETING BRIEFS

A new giant in the dairy business will result from merger of the South's Foremost Dairies (estimated volume \$160-million in 1953) and California's Golden State Co. (estimated volume \$122-million). If stockholders approve a proposed exchange of stock, the continuing company—Foremost Dairies—will run neck-and-neck with Beatrice Foods (estimated at \$275-million).

Clapp's Baby Food was sold by American Home Products Corp. to Duffy-Mott Co., big apple processor. An earlier deal with Harper Sibley, Jr., had fallen through (BW—Nov. 7 '53, p31). Duffy-Mott says the purchase will help to keep it producing in seasons when its own packing is slow. American Home Products says the sale—by its American Home Foods division—will let it concentrate on its food specialties.

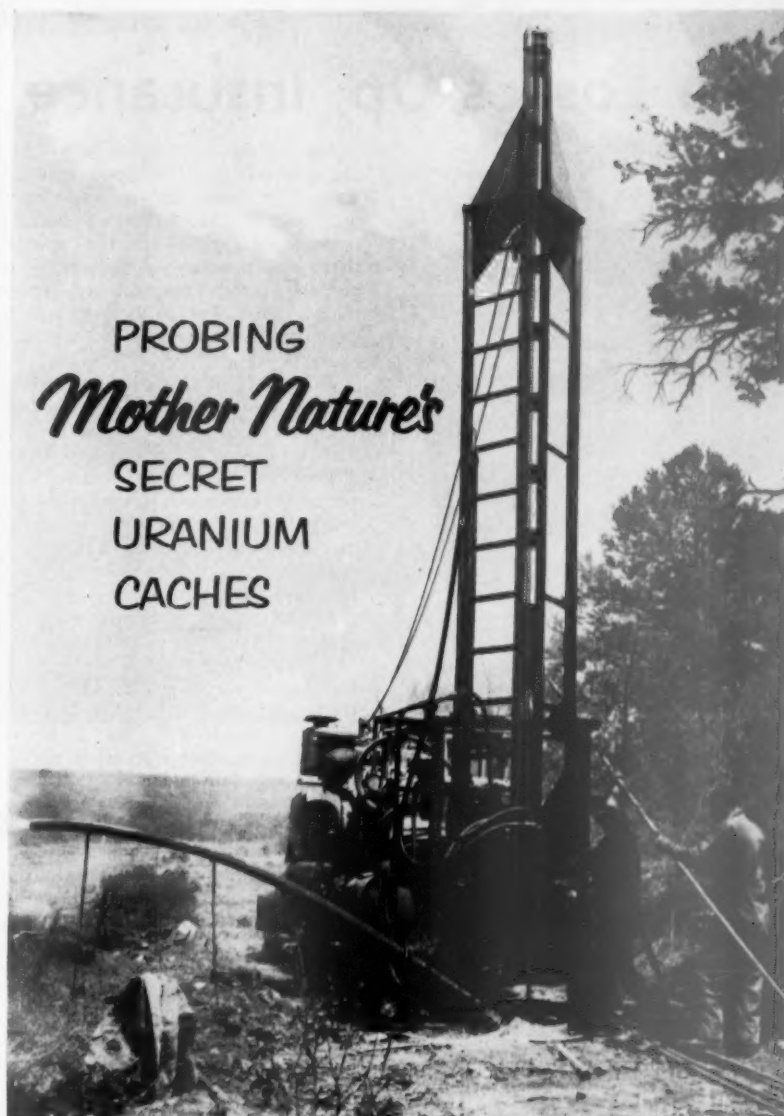
Traveling shaver: Radio Corp. of America is offering a new electric shaver designed for the hunter and fisherman. It has a battery kit in which you plug the shaver (110 v. to 130 v.). The batteries will operate both a.c. and d.c. razors.

Camden records, new RCA label, are selling nicely after a month on the market, the company reports. These are low-priced (69¢ to \$1.89) disks, mostly re-recordings of master artists who are sometimes not identified on the label.

Small breweries have had heavy going of it. Changing tastes in beer and the shift from draught to packaged caught many brewers flat-footed (BW—Apr. 19 '52, p147). Now they have a new sign of trouble. Jacob Hornung Brewing Co., 73-year-old Philadelphia concern, has suspended operations, sold plant and equipment. The reason: TV advertising has raised costs ruinously.

Follow-up to the battle of gasoline additives (BW—Nov. 14 '53, p61) is a race to step up quality of regular-grade gasoline. Union Oil Co. on the West Coast is bringing out its "new 76 gasoline," promises to promote it heavily. It's said to have a higher octane rating than its old 76, but will sell at the same price.

General Shoe Corp., of Nashville, Tenn., carried its expansion program (BW—Jan. 12 '52, p156) a step further this week by buying I. Miller & Sons, of New York. This brings General both new manufacturing facilities for higher-priced women's shoes and a number of I. Miller retail outlets.



### PROBING *Mother Nature's* SECRET URANIUM CACHES

*If valuable uranium ore underlies this desolate spot,  
these men will find it.*

They're modern uranium prospectors, probing three hundred feet or more below the surface to locate promising ore bodies.

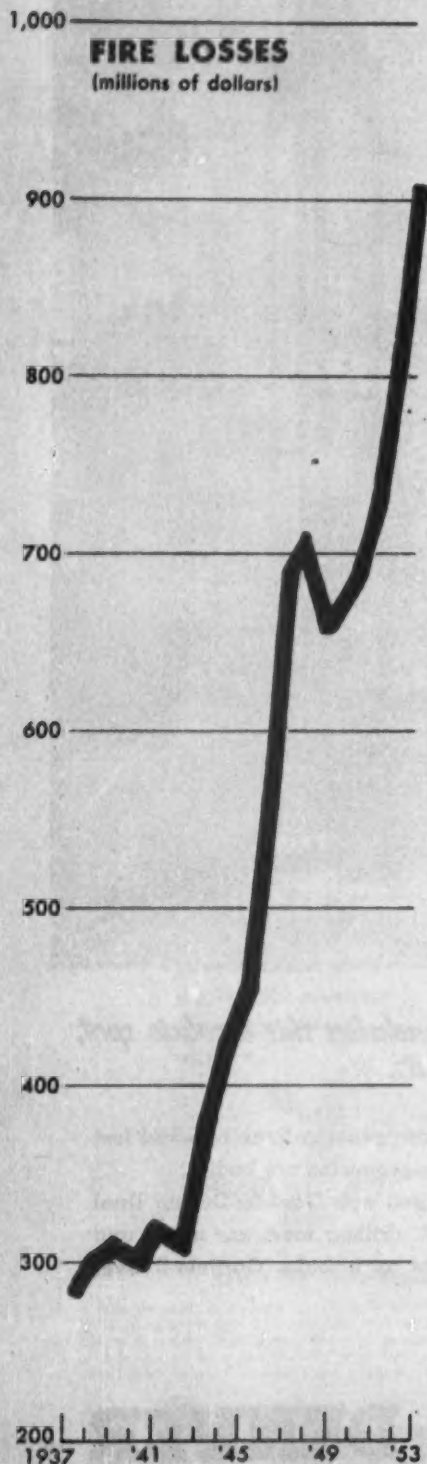
The drill rig they're using is equipped with Gardner-Denver Dual Pressure air compressor, rock drill, drilling mast, air motor and pneumatic controls. It's as efficient as it looks. Gardner-Denver Company, Quincy, Illinois.

SINCE 1859

## GARDNER-DENVER

THE QUALITY LEADER IN COMPRESSORS, PUMPS AND ROCK DRILLS  
FOR CONSTRUCTION, MINING, PETROLEUM AND GENERAL INDUSTRY

## Fire Losses Up, Insurance Profits Down



Data: National Bureau of Fire Underwriters;  
Geyer & Co.

Fire insurance companies are riding the downswing of the pendulum these days. Fire losses (chart, left) are rising sharply. Rates haven't been increased since 1947—to the contrary, there was a series of reductions last year—so profit margins are dipping (chart, right). Yet, in the long pull, fire insurance shares are regarded as a sound investment.

Investors, particularly financial institutions, still like fire company stocks in spite of the rising trend in losses and the sinking trend in profit margins since 1948. They aren't worried about the cyclical nature of the business. They know that state regulatory bodies will give the insurance companies, like the public utilities, the necessary rate relief to assure a fair return.

Regulators of insurance rates generally weigh profit margins over a five-year term. An average of 6% margin is considered about right. The rule of thumb is to cut rates when the profit margin exceeds 8% for a five-year stretch, to increase rates when the five-year average falls below 4%.

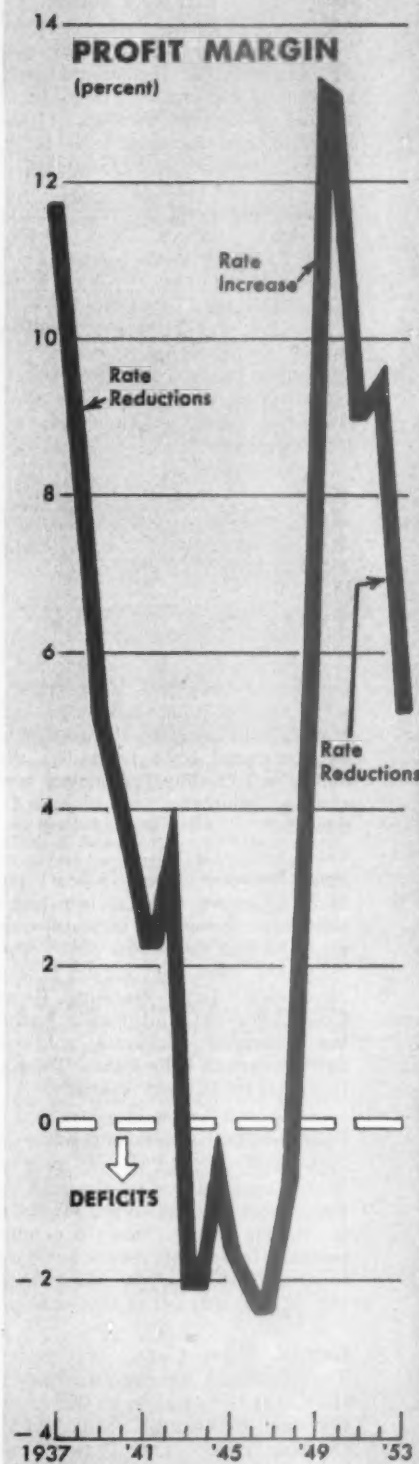
• **Current Trend**—Despite their sag, profit margins of fire companies are still far above a five-year average of 6%. A rise in premiums can be expected only if the present rate of return—about 5.2% in 1953 for companies doing a straight fire insurance business—continues to slide. The trend is sharply down, though: from 9.6% in 1952 to 5.2% in 1953—a 46% drop.

The last rate increase was in 1947, after five years of deficit operations. With the help of a slight decline in loss claims in 1949, the peak profit margin was hit in 1949—13.3%. It remained high at 13.1% in 1950, slid to 9.2% in 1951 and 9.6% in 1952.

Meanwhile, there's been a sharp rise in fire losses. Back in 1937, the nation's claims totaled \$285-million. By 1949, they were up to \$668-million. Then came \$688-million in 1950, a big jump to \$731-million in 1951, an even bigger jump to \$815-million in 1952. That was topped by a crushing increase to \$905-million this year.

• **Big Losers**—Variations in earnings on fire policies show up most pointedly, of course, in companies that specialize in that form of insurance. Houses that write casualty and other kinds of insurance and carry on big investment programs aren't hit so hard.

The danger now is that fire losses may continue to mount in the year ahead as they did in the year that's ending. Then—at least until rate increases could be justified on a five-year



Data: N. Y. State Insurance Dept.;  
Geyer & Co.

©BUSINESS WEEK



## The HARE, the TORTOISE and HIGH BLOOD PRESSURE

**N**EARLY everyone knows the famous Aesop fable about the hare and the tortoise. There is a good lesson in it for all of us, but for people who have high blood pressure this ancient fable can have a special meaning.

You may remember that the tortoise "pursued a slow but steady pace straight to the end of the course." Yet he won the race simply by taking it in his stride. Indeed, he took life much, much easier than the hare.

This is exactly what doctors wish that all patients who have high blood pressure, or hypertension, would do. In fact, people who have moderate, uncomplicated high blood pressure are often helped simply by learning to adjust their lives to a slower pace.

A relaxed attitude toward life is important in the treatment of this disorder because rush, "drive" and emotional tension can cause an already elevated blood pressure to rise to even higher levels. This is why doctors advise a steady, easy pace during the day and eight or more hours of sleep every night.

In addition, patients should carefully follow their doctor's advice about diet and eating habits. Above all, weight should be constantly kept at the proper level, because high blood pressure and overweight often go hand in hand.

People who learn to take these precautions may live happily, usefully and actively with hypertension even to old age.

Of course, if blood pressure reaches and

stays at an excessively high level . . . or if it is caused by an underlying disease . . . the situation becomes more serious. Even in these cases, there are often ways to lower pressure and relieve symptoms—such as drugs, surgery and special diets.

High blood pressure affects at least 4 million Americans . . . and is a major cause of heart disease in middle age and later years. If you have reached the years when high blood pressure is most likely to occur . . . if you are overweight . . . and if there has ever been high blood pressure in your family, do not neglect to see your doctor for regular medical examinations. When discovered early, hypertension is usually easier to control.

The outlook for still better methods of treating hypertension is promising—as studies by many agencies, including the Life Insurance Medical Research Fund, progress. The Fund, supported by 146 Life Insurance Companies, is devoting much of its research to hypertension and blood vessel disorders.

**Metropolitan Life  
Insurance Company**  
(A MUTUAL COMPANY)

1 MADISON AVE., NEW YORK 10, N. Y.

Please send me the free booklet, 1253-S, "Your Heart."

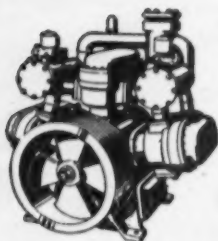
Name

Street

City  State



World's Largest  
Variety Store  
Air Conditioned  
with



Frick "ECLIPSE" compressors have 2, 3, 4, 6 or 9 cylinders with interchangeable parts.



McCrory's new store at Bond & Livingston Streets in Brooklyn, N. Y., will have over 1 1/4 miles of counters, and restaurant facilities for some 400 people at a time.

Complete air conditioning for the L-shaped building, which extends an entire block in two directions, was installed by Quinn & Feiner, Inc., of New York, who selected five Frick "ECLIPSE" compressors to carry the cooling load of 350 tons of refrigeration.

Get your copy of Bulletin 100, which tells the whole story about "ECLIPSE" refrigerating machines; they handle either Freon or ammonia, at high or low temperatures. Write . . .



In experimental  
or production manufacturing . . .

# BRIDGWATER

Sub-Contract Manufacturing  
May Be Your Most Practical Solution  
To Tough Machining Requirements

Whether your need is to produce experimental equipment or components, increase production, or simply expedite phases of your machining and fabricating, a Bridgwater Sub-Contract may be the efficient and economical solution to your problem.

At Bridgwater, three fully-equipped plants, full complements of long experienced metalworking craftsmen, and complete machine tool facilities are devoted *exclusively* to sub-contract work. Here you can count on Bridgwater's skill and know-how to put your job through quickly, precisely, and at favorable cost.



experience—profit margins might thin out to the vanishing point.

• **Riding a Yo-Yo**—The feast-and-famine cycle is nothing new to fire insurance companies, and no one's too worried now.

"The cyclical characteristic of underwriting experience is inherent in the very nature of insurance," one fire company man says. "The mishaps and misdeeds that cause claims against fire and casualty companies are utterly unpredictable as to their incidence and severity. Premium rates, in turn, must follow loss experience."

"Thus, we find that a particularly profitable underwriting period precipitates reductions in premium rates and a shrinkage in underwriting earnings; conversely, unprofitable underwriting experience leads to rising premium rates and improved underwriting profits."

• **Costs Are Up, Too**—The usual peaks and valleys of fire company earnings have been accentuated by the inflationary rise in the prices of everything, including construction, since the early years of the war. As the chart on page 60 shows, fire claims were moving slowly upward before the war, but the volume of money involved really began to soar in 1943.

"Our rates were held down during World War II, when price control was supposedly keeping the economy under a wartime price lid, but you'd never know it from the trend of fire damage claims," says one fire insurance man. "The big war production push was hardly under way before both material and labor began to shoot upward. The value of buildings, both new and old, began to rise, too. Except for a small decline in 1949, fire claims year by year have been moving higher and higher."

• **Livonia Not to Blame**—Insurance men emphasize, incidentally, that the \$35-million fire that destroyed the General Motors transmission plant at Livonia, Mich. (BW—Aug. 22 '53, p. 28), can't be blamed entirely for the latest sharp rise in fire losses.

Reports had been going the rounds, pointing the finger at Livonia. But figures of the National Board of Fire Underwriters show the Livonia loss as only a phase of a general rise that started in June. Through May, national fire losses were running only 5.3% above the same months of 1952. In June through October, the board estimated losses at 29.3% above the same months of 1952. And, leaving out August—the month of the GM fire—losses for the four remaining months were up 15% from the 1952 period.

• **Watching Costs**—It is replacement cost that determines the dollar loss, so insurance companies are watching construction prices.

"Everybody is talking about the

*This announcement is neither an offer to sell nor a solicitation of an offer to buy any of these Debentures. The offer is made only by the Prospectus.*

**\$300,000,000**

# **General Motors Corporation**

**Twenty-Five Year 3¼% Debentures Due 1979**

*Dated January 1, 1954*

*Due January 1, 1979*

*Interest payable January 1 and July 1 in New York City or Detroit*

---

**Price 100½% and Accrued Interest**

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*Copies of the Prospectus may be obtained from only such of the undersigned as may legally offer these Debentures in compliance with the securities laws of the respective States.*

**MORGAN STANLEY & CO.**

**DILLON, READ & CO. INC. THE FIRST BOSTON CORPORATION KUHN, LOEB & CO.**

**BLYTH & CO., INC. DREXEL & CO. EASTMAN, DILLON & CO.**

**GLORE, FORGAN & CO. GOLDMAN, SACHS & CO. HARRIMAN RIPLEY & CO.**  
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**KIDDER, PEABODY & CO. LAZARD FRERES & CO. LEHMAN BROTHERS**

**MERRILL LYNCH, PIERCE, FENNER & BEANE SALOMON BROS. & HUTZLER**

**SMITH, BARNEY & CO. STONE & WEBSTER SECURITIES CORPORATION**

**UNION SECURITIES CORPORATION WHITE, WELD & CO.**

*December 9, 1953.*



## New manual helps CUT COSTS in your offset duplicating department

**NEW! FIRST OF ITS KIND!** Fully illustrated. Written especially for executives. Explains in non-technical language exactly how to get the most return from the valuable floor space allotted your printing department. Suggests new methods to increase its output. Illustrates new production ideas.

And it tells all about the 3M Plate—the sensational all-aluminum photo-offset plate that's improving the quality of printed pieces for companies everywhere. Send today.

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possibility of some kind of slide in business, eventually," a company spokesman says. "Well, the fire companies are one industry that would actually be helped if the pace of industrial activity eases up a bit—they'd gain if the uptrend was reversed in costs of building materials and of labor. In fact, you will find that in the past we've always done better with a little slip in business."

• **Strong on Board**—Wall Street generally recognizes fire insurance company shares as "defensive" investments. Like the utilities and food companies, they are held to do better than in-

dustrials in times of a business slowdown.

Big institutional investors—the "sophisticated money"—go for fire shares as not only a defensive investment but also as a group of stocks that can be held for 25 or 30 years with the expectation of an appreciation in value.

As a result, Standard & Poor's index of prices of the shares of 17 fire insurance companies stood last week at 227.4 (with 1939 as 100). This wasn't far below the 236.7 that was set on Jan. 7, when the index was the highest since the 249.1 recorded in the 1929 boom.

## Setback for Arbitration Pacts

Supreme Court decision holds that investors can't sign away their rights under the Securities Act. Wall Street fears a snag in quick settlement of disputes out of court.

Those compulsory arbitration agreements that investors must sign when opening brokerage house "margin" accounts aren't enforceable by brokers, the Supreme Court decided last week.

By a 7-2 vote, the court ruled that the 1933 Securities Act assures an investor the right to sue in court an investment firm for damages for misrepresenting a stock sale. Waiver of this right by signing an advance arbitration agreement isn't binding, the court said in a majority opinion written by Justice Stanley F. Reed.

• **Majority View**—In its ruling the court did not condemn "prior arbitration agreements" per se. The court recognized, Justice Reed said, "the advantages . . . [they] . . . may provide for the solution of commercial controversies." He noted also that parties in investor-broker arbitration proceedings bear the same burdens of proof imposed by the Securities Act. Nonetheless, the majority opinion said, arbitration of such disputes may lack the certainty and force of a suit in court.

• **Minority View**—Justice Felix Frankfurter, who dissented along with Justice Sherman Minton, said the court should have upheld a federal Court of Appeals ruling that such arbitration agreements are valid and fully protect investors' rights. Frankfurter did not agree that arbitration settlements, as a practical matter, were too sketchy to allow adequate review by the courts.

Justice Robert H. Jackson agreed with Reed's majority conclusion, but observed he didn't think it was necessary to talk about the difficulty of getting judicial remedies for mistakes of law made by arbitrators.

• **Facts**—The case involved a claim that Hayden, Stone & Co., prominent Wall Street brokerage-investment bank-

ing house, had misrepresented some facts and failed to tell others in January, 1951, in selling 1,600 shares of Air Associates, Inc., common stock to Anthony Wilko, a client, at a price of some \$30,000. Instead of the profit he had expected to reap on the deal, Wilko claims he lost almost \$4,000 on the shares when disposing of them two weeks later.

When Wilko subsequently tried to collect damages in federal district court, Hayden, Stone contended that the arbitration agreement he had earlier signed prevented him from suing. That contention was rejected in the district court. But the brokerage house appealed, and the Circuit Court of Appeals stated: "We do not find in the purpose of the language of the statute [Securities Act] any policy strong enough to override the previously signed arbitration agreement."

• **Monkey Wrench?**—Obviously, Streeters aren't at all happy over the Supreme Court's ruling. These arbitration agreements have long been used—not to "gyp" clients, brokers say, but to assure settling disputes faster than they can be settled in court.

There haven't been a great many such proceedings. Only around 20 to 25 cases a year have been brought to the New York Stock Exchange for handling. Moreover, such disputes rarely involve violations of SEC regulations or rules.

Normally, to handle such cases in the past, a panel of five arbitrators has been chosen by disputants from a group of 15 members or allied members of the Big Board. Sometimes, however, such cases have been referred instead to a panel selected by the American Board of Arbitration.

• **Long-Run Effect**—Does last week's

IT TAKES A SPECIALIST  
TO INSURE THE BEST...

## Automatic

### TEMPERATURE CONTROL

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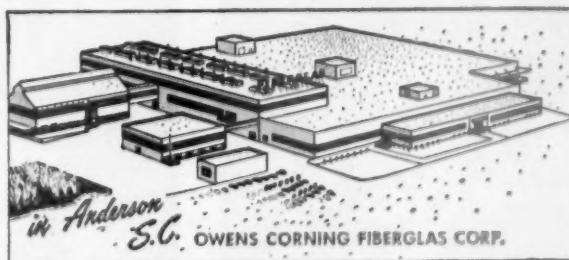
Providing automatic temperature control systems to meet the varied requirements of today's buildings is a job for a specialist. That specialist is the Johnson Service Company, the *only* nationwide organization devoted exclusively to manufacturing, planning and installing automatic temperature control systems.

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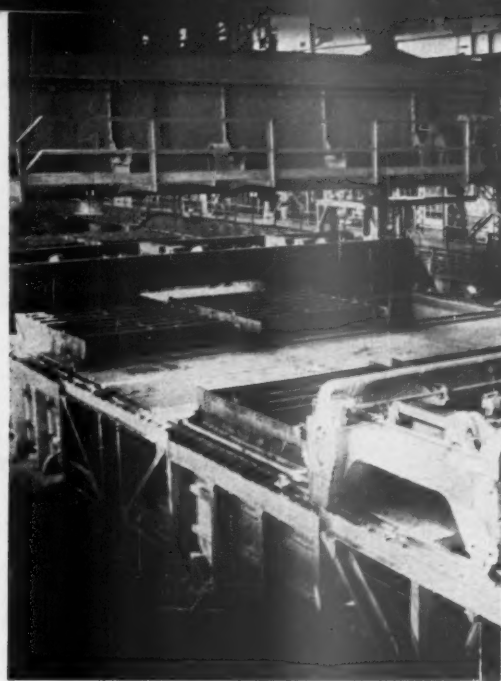
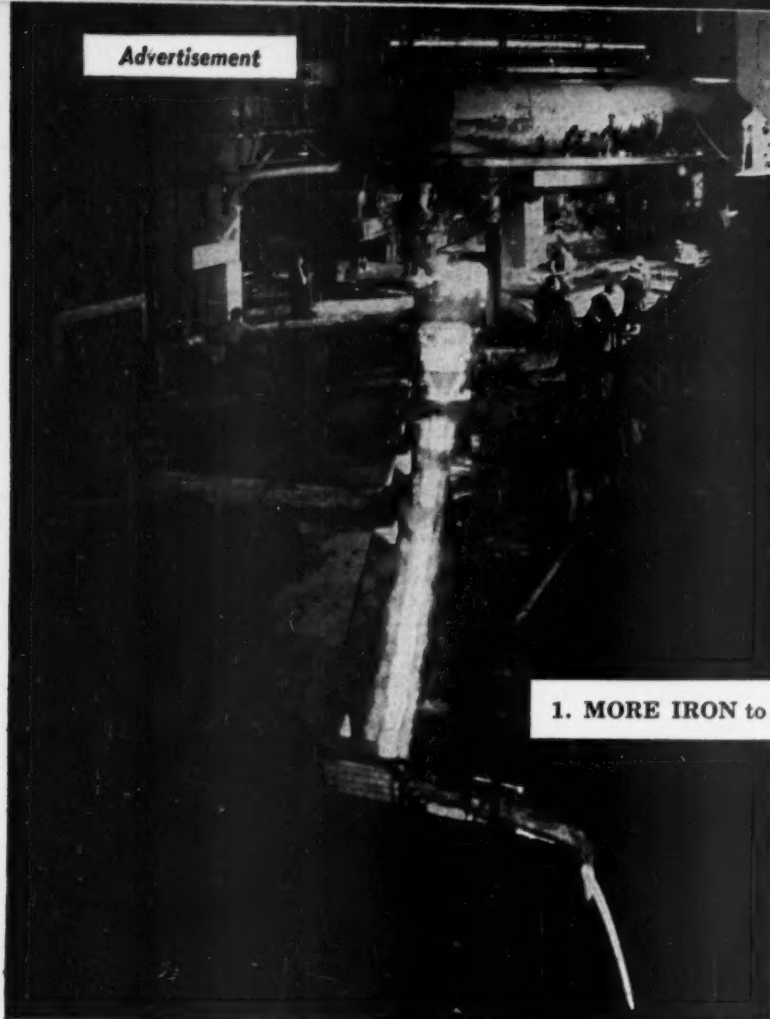


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1. MORE IRON to make more steel, plus . . . 2. MORE INGOTS



**Edwin A. "Eddie" Dawson**, started at Pittsburgh Steel Company nailing lids on nail kegs during his vacation from high school in the summer of 1922. Today, as superintendent of rolling, he has charge of: (1) the soaking pits (photo No. 2 above) where a \$3.5-million expansion is now four-fifths complete, (2) the recently installed blooming-slabbing mill, (3) the billet and bar mills.



**C. D. "Charley" Steele**, 29 years with Pittsburgh Steel, started as a labor foreman in the blast furnace department. Today, he is superintendent of the department. No. 3 blast furnace (photo No. 1 above), one of "Charley" Steele's 10-story-high iron makers, went back into production recently after a \$1.4-million rebuilding to increase capacity by 64,000 net tons a year.

## Add Up

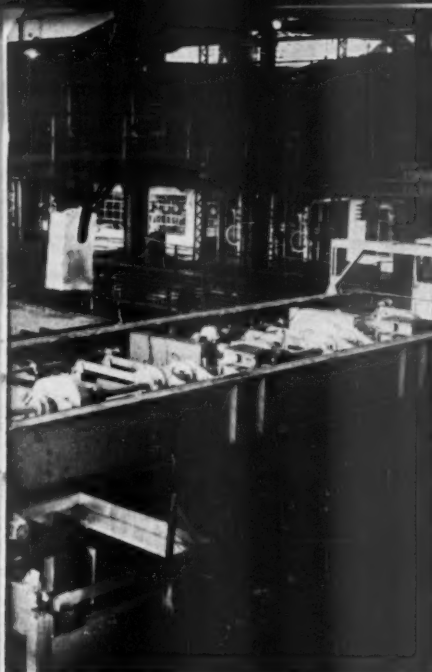
Pittsburgh Steel Company's Program of Progress is entering the home stretch. The \$64-million expansion and improvement program, started three years ago, will be completed early next year when the company starts up a new \$15-million, 66" cold rolled sheet mill now nearing completion (photo No. 3 above).

Under this program, Pittsburgh Steel is becoming a new steel company. Steelmaking capacity has been increased 48%. Facilities to make this steel into finished products are being increased 82%. Percentage-wise, it's the largest expansion to be completed by any steel producer in recent years.

Already shipments of finished steel products are reaching record-breaking levels as new soaking pits (photo No. 2 above) have started operation and production rises at the company's new hot rolled sheet mill.

During the ten years prior to the start of the company's expansion, total shipments of all steel products averaged 695,000 net tons a year. One-third of this was in seamless tubes, one-third in wire, and one-third in semi-finished steel.

Goal of the current program is the



to make more slabs and blooms, plus . . . 3. MORE FINISHING equipment on the way . . .

## To: A New Steel Company

capacity to produce 1,192,000 net tons of finished steel products annually, of which 52% will be in sheet steel products, 27% in seamless tubes, and 21% in wire and wire products.

What does it all mean to you? Simply this:

If you use flat rolled steel, seamless tubes or steel wire in the manufacture of your products, you have a more dependable source of supply for steel products of better quality.

If you own shares in Pittsburgh Steel, your investment has increased in value, and your chances for increased earnings are better. Now equipped with more modern and more economically operated facilities, your company is producing more profitable products and is better able to compete for a larger share of the steel business.

If you are an employee of Pittsburgh Steel your opportunities for earnings and advancement are greater and your job is more secure because the company is larger and has added a wider variety of goods and services to its line.

In fact, everyone benefits from a strong, modern and productive steel

industry because steel is the backbone of all industry—both in peace and for defense.

Pittsburgh Steel is making the transition from an old to a new steel com-

pany with new mills, new equipment, new products and new markets. Experienced men are working together as a team with enthusiasm and confidence in the future.

### Program of Progress

Acquisition of Thomas Steel . . . . .	100% Complete
Increase of Blast Furnace Capacity by 12% . . . . .	85% Complete
Increase of Open Hearth Capacity by 48% . . . . .	100% Complete
Installation of new 66-inch High Lift Blooming-Slabbing Mill . . . . .	100% Complete
Installation of Continuous 66-inch Hot Rolled Sheet-Strip Mill . . . . .	100% Complete
Installation of 66-inch Cold Rolled Sheet-Strip Mill . . . . .	85% Complete

*"Everything New But The Name"*

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## for industry 2000 Choice Acres in the Heart of America!

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## OPPORTUNITIES

MAY BE SOUGHT FROM, OR OFFERED TO, MANAGEMENT-MEN  
THROUGH BUSINESS WEEK'S CLASSIFIED SECTION . . . clues

decision put an end to investor-broker arbitration proceedings agreed to after a dispute has occurred?

The Securities & Exchange Commission—which appeared before the Supreme Court to support Wilko's contentions—doesn't think so. SEC points out that the Supreme Court expressly said it was not ruling on whether arbitration agreed to after controversies exist is also invalid.

Streeters at the moment, however, aren't so certain. After all, some say, the Supreme Court's decision interprets the Securities Act as forbidding the waiver of any rights by the investors it protects.

## GM Bond's a Hit

Its record \$300-million issue yielding 3.22% went fast. The picture wasn't so rosy for municipals.

Sale of the \$300-million offering of General Motors Corp. 3½% debentures, due 1979—biggest piece of public industrial financing on record (BW—Nov. 21'53,p146)—went over with a bang last week.

Placed on the market by a group of 298 investment houses headed by Morgan Stanley & Co., New York, at \$1,005 per \$1,000 bond—a price yielding the investor around 3.22%—the 25-year issue was sold out in no time. In over-the-counter trading the bonds soon were commanding a robust premium of around one point (\$10).

• **Slow Seller**—The good news inspired another investment banking group to sharpen pencils even finer. Last week they launched a \$20-million issue of Philadelphia Electric Co. 30-year, 3½% first and refunding mortgage bonds at a price yielding only 3.15%, the lowest yield for any corporate bond issue in many a day. The Philly bonds weren't grabbed up the way the GM 3½s were. Demand was "slow to fair," according to early reports.

• **Municipal Lethargy**—Meantime, for the sixth week in a row, the Dow-Jones index of 20 representative 20-year municipal bonds hovered at the average yield figure of 2.56%. There was other evidence, too, that the tax-exempt market was tired. The Blue List showed a total of almost \$185-million of unsold publicly offered municipals on dealers' shelves, the largest pile-up since last June 13. Bonds in dealers' inventories have been rising steadily since Nov. 6.

One reason for these signs of fatigue is the fact that around \$552-million of state, municipal, and other tax-exempt issues are scheduled for sale this week,



4000 B.C.—they ground a few pounds at a time.



1400 A.D.—some mechanization has been added.



Today—this giant C-E Raymond Mill pulverizes 40 tons an hour.

# PULVERIZING—

An ancient process that's become

# BIG BUSINESS

*Thousands of years ago—before man began to record his own history—an unknown genius learned to make flour by crushing grain between two rocks. Thus, this distant ancestor laid one of the first firm foundation stones for our industrial civilization.*

**T**ODAY, literally thousands of the vital materials of everyday life depend on pulverizing: Plastics, for example—those magic resins whose uses seem nearly endless—as well as such diversified materials as minerals, coal, cocoa, pigments, sugar, limestone and face powder—to mention just a few.

Through its Raymond Division, Combustion has been associated with this field since 1887. Raymond Pulverizers have had long, successful histories handling such diverse materials as mentioned above and many hundreds of others. Some are ground to near invisibility...others are as coarse as a tenth of an inch!

But whatever the material...whatever the product—C-E Raymond Pulverizers have achieved the prestige and wide acceptance common to *all* Combustion Equipment. For steam generating or fuel burning equipment...for pulverizers...for flash drying systems...for chemical recovery equipment...even for cast iron soil pipe and domestic water heaters—you can always look to Combustion for the skill, the experience and the facilities to meet your requirements exactly.

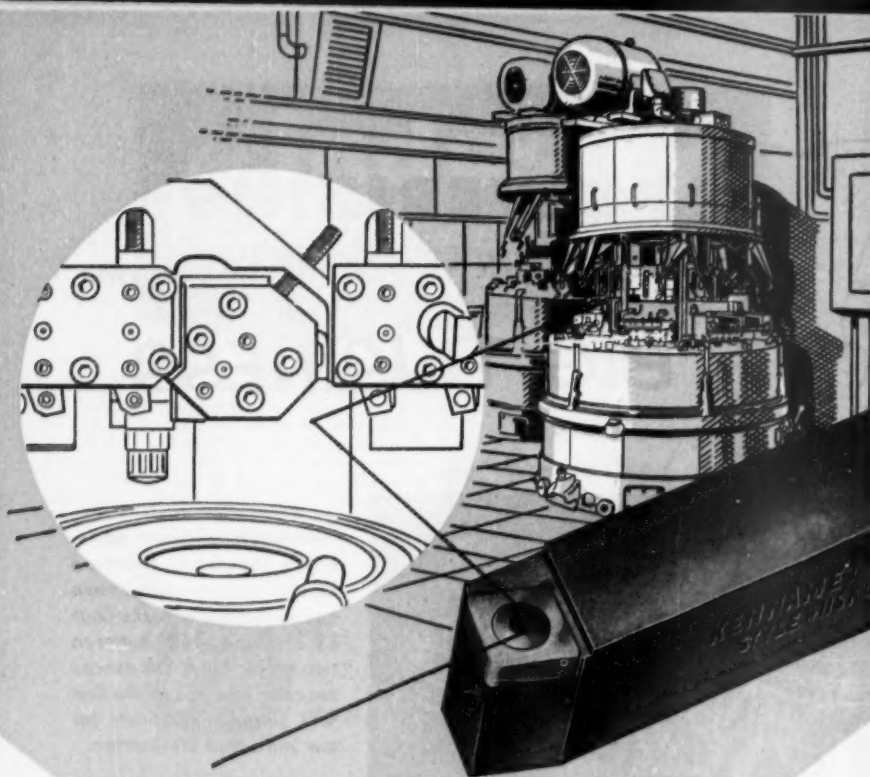
## COMBUSTION ENGINEERING, INC.

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B-709



## KENDEX\* Tooling Keeps Automation in Action

Automation—the new trend toward automatic conveying, loading, machining, unloading, and transferring of workpieces—promises great gains in productivity, but it must have cutting tools designed for the operation.

Two essential features in cutting tools for automation are: (1) durability for sustained operation with minimum stoppage for tool changing, and, (2) precision-ground, pre-set, multiple-edge tools designed to permit quick changing when necessary.

Kendex "throw-away" inserts—an exclusive Kennametal\* development—have both features. Made of Kennametal, they have its high hardness and great durability for long service. Screw-mounted, they can be rotated in seconds, to new cutting positions or quickly replaced after all the cutting edges have been used.

In one "automated" plant, flywheels are being machined with Kendex "buttons"

at a tool cost of 1¢ per wheel—one-third of the former cost with conventional tooling. Up to 1,000 flywheels are machined without resharpener, whereas previously-used tools produced only 65—machine down time has been greatly reduced, and tremendous savings effected.

While automation's advantages promise great ultimate economy in metalworking—Kendex throw-away "buttons", and other Kennametal tooling, can reduce your machining costs now . . . either on production-run or job-lot operations. Or, if wear is a critical factor in your products, performance may be greatly improved by Kennametal's high abrasion, shock, and wear-resistance properties. This unique tungsten carbide material is almost as hard as the diamond—up to 100 times as resistant to wear as steel.

Tell us your problem. Our metallurgists and engineers may be able to help you solve it with Kennametal.

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Latrobe, Pa.

WORLD'S LARGEST Independent Manufacturer  
Whose Facilities are Devoted Exclusively to Processing and Application of CEMENTED CARBIDES

SALES OFFICES IN PRINCIPAL CITIES

a sheaf of offerings equal to 10% of the \$5-billion-odd total tax-exempts expected to hit the market this year.

This week's big parcel includes almost \$122-million of Public Housing Administration bonds, \$280-million of Indiana Toll Road Commission revenue bond issue, and \$99.8-million of Mackinac Bridge Authority Series A and B revenue bonds.

How fast these issues move into buyers' hands depends mostly on the offering price tags—at least that's the word on the Street.

### FINANCE BRIEFS

Long-term Treasury bond prices have really zoomed lately. Last week saw records broken with bids as high as 105% of par (a 2.95% yield basis) for the 3½s, 1978-83, and as high as 102% (yielding 2.45%) for the new 2½s, 1961. Last spring the 3½s were offered at prices as low as 98 20/32% of par (or a 3.32% basis). The 2½s were sold by the Treasury in October at par.

American Telephone & Telegraph Co. stockholders purchased almost 99% of Mother Bell's recent record-breaking \$602.5-million convertible debenture offering (BW-Aug.29'53,p59). They sent in, according to the company, over 400,000 individual subscriptions totaling \$596-million.

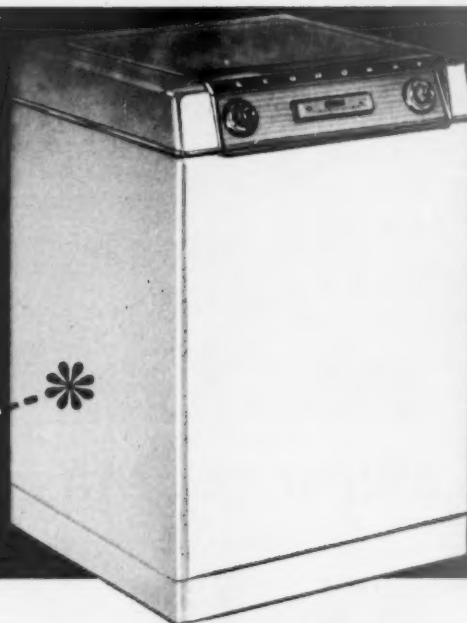
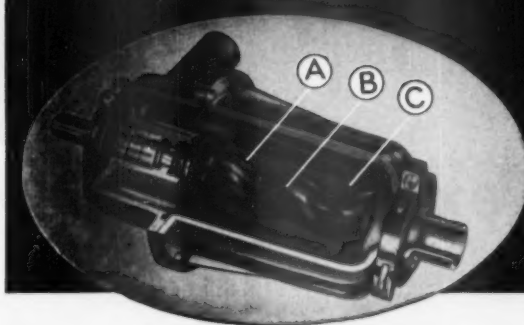
Bank investment portfolios have grown faster than loan holdings in the fall season. It's the first time this has happened in several years, reports New York's Federal Reserve Bank. Due to the contraseasonal drop in loan demand generally, it points out, the loan total of the nation's weekly reporting commercial banks rose only \$582-million during a recent four-week period, while other investments soared \$886-million. In the same weeks in 1952, loans zoomed \$900-million, security holdings dropped \$728-million.

E and H savings bond sales jumped 25% in November to \$339.2-million, exceeding cash-ins by \$15.8-million. January-November sales, the Treasury adds, rose 23% to just under \$4-billion. Cash-ins for the 11 months added up to only \$3.8-billion.

Harris-Seybold Co.'s recent purchase of C. B. Cottrell & Sons Co. (BW-Dec. 12'53,p118) will cost the former "in the neighborhood of \$3.5-million," reports president George S. Dively. To cover this expense, the company is planning some permanent financing.

The money-saving Economat Washer, built by Bendix Home Appliances, South Bend. Moyno Pump pulls water, then air, down through passage in agitator shaft. This collapses the tough, flexible tube—squeezing clothes damp-dry. Fewer moving parts—yet fully automatic.

Cutaway of small Moyno as used on Bendix Economat Washer. Note progressing cavities (A) that form as molded rotor (B) turns within synthetic rubber stator (C). Capacity of this model: 8 1/2 g.p.m. at 1150 r.p.m.



## Pump life increased 650% in Bendix Economat Washer with the versatile MOYNO® Pump!

### FACTS ABOUT THE MOYNO

#### *the world's simplest pump!*

**Versatile**—Pumps liquid, pastes, abrasive-laden slurries. Adaptable to heavy industrial machinery or small drink dispensers, oil burners, sprayers, etc.

**Positive Displacement**—Moynos are available to pull up to 29" of vacuum while discharging under pressure. Big Moynos can deliver up to 250 gallons per minute. Pressures up to 600 psi can be obtained. Pumps in either direction!

**Gentle**—No churning, foaming; won't break up semi-solids. One Moyno is actually pumping potato salad!

**Trouble-Free**—Self priming; won't cavitate or vapor-lock. Just one moving part—no valves to stick, no pistons to gum up. Low starting and running torque.

An unusual application of interest to builders of products using pumps.

Bendix Home Appliances' answer for a lower-priced fully automatic washer was *fewer moving parts*... a flexible tub to contract and squeeze clothes dry. Problem: finding an air-water vacuum pump that would do the job.

Bendix tested several different pumps, but none met specifications. The best averaged only 200 cycles before lint, golf tees, buttons and similar foreign particles caused damage and clogging.

But two years ago a completely different pump was first used in production—the R & M Moyno Pump. Specifications required 27" minimum vacuum for a new pump... Moynos pulled 28". Specifications allowed a drop to 26" after 1500 cycles... Moynos had virtually no drop. In short, Moynos clearly out-performed the other pumps tested, and lasted seven and a half times longer! *Several Moynos still performed*

*well after 3000 cycles... equivalent to 10 years of normal washer operation.*

Service? With Moyno Pumps as standard equipment, pump service calls are practically non-existent. Foreign particles don't cause trouble. Lint passes through the Moyno easily, without clogging.

#### **Moynos may help improve YOUR product!**

If you use pumps, find out about the Moyno—the world's simplest pump! Your application needn't involve vacuum; possibly you need *non-pulsating pressure*. Nor must you take a "standard" Moyno. If necessary, the progressing-cavity principle can be adapted to your requirements, as it was so successfully to the Bendix Economat Washer.

#### **Get more facts!**

Returning the coupon below will bring you an interesting, factual bulletin on the Moyno Pump—and how it works. It costs nothing to find out if this problem-solving pump can help you... mail the coupon today!

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# REGIONS



## Lawrence, Mass.: Textile Town Stays



**WOOLEN-WORSTED CENTER** Lawrence, Mass., since 1947 has taken a beating. About 20% of its work force are jobless yet . . .



**THE PARADOX** is that instead of a closed-down depression city you find a hustling, modern town doing a bigger retail trade today than ever before (below). How come? Partly the answer is tied up in some still-unknown facts behind the unemployment figures, but mostly it's a drive to bring new industry to abandoned mills (above). Result . . .



# Healthy

(Story continues on p. 74)



**NEW JOBS FOR OLD.** Some 30 new plants have opened. After working with Arlington Mills for 20 years, worker Albert Poulin is making heaters at Craig Co.



## PRESIDENT SEES BIGGER PROFITS WITH MODERN LUBRICATION

### Key to a \$112,500 production increase— \$2,200 investment in centralized lubrication

**The Problem:** This Weber paper bag machine at Ohio's General Bag Corporation has to be thoroughly greased once a week. Greasing the 84 bearings on the machine by hand would mean a complete 3-hour shutdown. Productionwise, that's 15,000 bags lost—worth \$500—every week!

**The Solution:** Investing \$2,200, management installed a Farval system of centralized lubrication which functions *while the machine is in operation*. Instead of 3 hours, lubrication now takes only 3 minutes!

**The Profit Story:** \$112,500 added to bag production in 4½ years! Plus 50% savings in grease! So impressive are these figures that management is having a new \$80,000 bag machine *Farvalized*, too. On the basis of savings realized on the old machine with Farval, the new machine will be paid for in just slightly over three years.

This example indicates the tremendous savings Farval can bring on industrial equipment—in production, lubricant, man hours! Why not write for our Free Lubrication Survey to learn how Farval can help you?

#### WRITE for:

##### Free Lubrication Survey

Without obligation, we will send one of our lubrication engineers to inspect your plant equipment and present a written analysis of what Farval can do for you.

##### Bulletin 26

Illustrated 20-page book tells the full story of Farval, how it works and how it can save you money.

FARVAL is the foolproof Dualine system of centralized lubrication that delivers a measured amount of clean lubricant at regular intervals to every bearing. From a central station, lubricant is pumped under pressure to a measuring valve at each bearing, providing the exact amount of lubricant desired.

### THE FARVAL CORPORATION

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Farval is an affiliate of The Cleveland Worm & Gear Company  
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Here's what **micarta**  
LAMINATED PLASTICS  
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Your problem may be as simple as noise control, or electrical insulation. Perhaps you need a material that is both light and strong, that resists corrosion, withstands vibration, heat, cold or compression. Whatever your problem, your industry, or your application, investigate the qualities of versatile MICARTA.

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Attention: L. A. Pedley

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- ☐ Please have your representative call  
☐ Please send me the complete facts on MICARTA

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J-06511



HEADING CAMPAIGN to bring new industry is Greater Lawrence Citizens Committee for Industrial Development.

## Textile Town

(Story starts on p. 72)

Christmas shopping reached a bustling peak this week in Lawrence, Mass. Merchants along brightly lighted, crowded Essex St. reported a high volume of business. Charities got a hearty response to annual Yuletide fund appeals. On the surface, the woolen-worsted center deep in the Merrimack Valley is prosperous. But, unfortunately, Lawrence is a city of paradoxical contrasts.

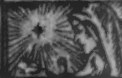
Its business indexes are uniformly favorable, with high-level retail sales, increasing savings, and generally sound credit conditions. At the same time, the Massachusetts Division of Employment Security reports 10,800 jobless in the Greater Lawrence area with a work force of only 54,000. That's 20% unemployment—and basis for Lawrence's government listing as a "chronic unemployment" area (BW—Nov. 14 '53, p. 32).

The paradox of Lawrence is as puzzling to those inside the city as to outsiders. It can lead to quick—and usually mistaken—conclusions: that Lawrence is a depressed city, or that the impact of unemployment on its economy has been comparatively light. The true situation is somewhere between those extremes.

Pinning it down raises a question important to public and civic interests in many cities: How much can you rely on business statistics and employment figures? While Lawrence provides no answer to the question, it sheds some light on factors behind it.

• **Textile Toll**—Bad times hit Lawrence's century-old woolen-worsted industry in 1947. Mills along the historic Merrimack River began closing. Within six years, more than 18,000 textile jobs

**IN THE YEAR** from the creation of the world,



when in the beginning God created heaven & earth,  
five thousand, one hundred & ninety-nine;

From the flood, two thousand, nine hundred & fifty-seven;

From the birth of Abraham, two thousand, five hundred & ten;

From the anointing of King David, one thousand & thirty-two;

In the sixty-fifth week according to the prophecy of Daniel;

In the one hundred & ninety-fourth Olympiad;

In the year seven hundred & fifty-two

from the founding of the city of Rome;

In the fifty-second year of the empire of Octavian Augustus,

when the whole world was at peace;

In the sixth age of the world,

**JESUS CHRIST**, eternal God, and Son of the eternal Father...

Is born in Bethlehem of Juda, having become man of the Virgin Mary.



PROCLAMATION OF CHRISTMAS

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were wiped out in the Greater Lawrence area of 126,000 population.

The area was listed early in 1949 as the nation's No. 1 unemployment problem. During that year, official figures showed 24,000 jobless out of a work force of about 61,000. Nevertheless, Lawrence was no depression city; it was getting along pretty well despite the hard-hitting mill layoffs (BW-May 7 '49, p24). Within a year, Lawrence was beginning to show a little progress with a bid to create new jobs in new plants—outside the textile industry—for its surplus workers (BW-Jun. 10 '50, p61). Since then more mills have shut down as excess production facilities in the woolen-worsted industry were liquidated—but, according to the figures, Lawrence has just about held its own by providing new jobs for the textile workers idled by shutdowns.

• **Figures and the Facts**—The "according to the figures" is important: In 1950, the Greater Lawrence area showed 9,600 collecting unemployment compensation—about the same number as in October of this year. But in 1950, the Greater Lawrence work force was 61,000 and the number working was 51,000—while in October, 1953, the work force was down to 53,000 and the number on payrolls had shrunk to 44,000.

On paper, the area currently has about 10,800 unemployed. But, somewhere, there are at least 7,000 additional workers who were employed in this area three years ago who are not now. They may be jobless, or out of the work force, or just unaccounted for.

Some have left the area. Some are commuting out of Greater Lawrence homes to jobs in Boston and elsewhere.

Many of the others are off the unemployment compensation roll because they haven't worked long enough to be eligible for benefits. But how many are in this group? Do they want to work? Are they suffering any hardship from lack of the income they had in textile's better years?

• **Surprise Prosperity**—Not long ago U. S. Rubber Co. sent a recruiting team into Lawrence, hoping to fill 200 jobs in a new Connecticut mill. The campaign was based entirely on Lawrence's listing as a chronic unemployment area. The recruiting team opened for business, expecting a rush. It succeeded in filling only six of the 200 jobs after several listless days.

Why? There is joblessness, but apparently no desperation—no grasping at any job, regardless of location, pay, and work conditions. Part of the explanation is that Lawrence is traditionally a multiworker family city. That cuts the hardship. And it also rescues mobility.

Of course, joblessness, no matter who it affects, cuts into gross income—but, again, the figures seem to indicate a

The rubber base of each valve is roughened by a Pittsburgh brush to secure a better bond when vulcanizing the valve to a tube.

Pittsburgh brushes remove excess rubber which spills onto valve cap thread during vulcanizing operation. (Guard housing has been removed for clarity.)



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## 850 NEW INDUSTRIES HAVE MOVED TO IOWA SINCE 1945



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Good living in the land of plenty — that's Iowa. A favorable balance (50-50) of agriculture and industry has made it rich. Yet with its central location and great network of highways and railroads, Iowa is close to the largest centers of commerce. Iowa has in abundance the "basics" that any industry must have: an intelligent labor supply, raw materials, a wide selection of factory sites and a sympathetic state government. Write for your copy of "Industry's Road to Opportunity." 427 Central National Building, Des Moines 9, Iowa.



**IOWA  
LAND OF THE  
GOLD THAT GROWS**

**IOWA DEVELOPMENT COMMISSION**

minimum effect on business. Take a look:

The Lawrence Community Chest just completed its most successful Red Feather drive yet, raising \$202,500.

Retail sales are currently running at a rate of over \$100-million annually—far more than annual retail sales during textile boom periods. Bank deposits are at an all-time high, topping \$189-million.

Gross income after personal taxes in 1952 (last year for which there are complete figures) was \$112-million, or \$9-million more than in 1951. The average family income climbed above \$4,700 a year, or \$500 ahead of the previous year.

• **Contradiction and Explanation**—Obviously, Lawrence—despite its "chronic unemployment" tag—is not the sort of place a businessman thinks of when he hears the Lawrence jobless total: It's no boarded-up, shut-down city of despondency and despair, with skyrocketing taxes and high relief rolls.

It's a bustling small city, with modern and well-stocked stores and expanding business establishments. Except for a few vacant store buildings in a marginal business area, few of the tell-tale signs of a declining city can be seen.

That's the big contradiction of Lawrence. Can it be explained? Not completely, without more information about who the unemployed really are and what is happening to them. Such a survey is that which the Bureau of Employment Security announced in November, and plans to undertake shortly on a national basis.

But one thing is certain: The signs of well-being that exist in Lawrence can be credited to the area's own Yankee ingenuity and determination.

• **Drive to Diversify**—Back in 1949, when textile employment began dropping fast, people in the Lawrence area watched for a turn—in blind faith that mills would reopen. That attitude didn't last long. It became apparent fast that textiles would never again set the high levels of the past in the area.

The next thought was a natural one for the times: Let the federal government work out the problem.

But then, when there were no signs of federal aid, Lawrence set out on an "Operation Bootstrap" aimed at building up a diversified light industry to fill the vacuum left by textile shutdowns. Its first efforts were hampered by a lack of coordination—everybody pitched in to help get new industries and inevitably there were conflicts, rivalries, and missed opportunities.

But there were successes, too. The acres of industrial space available in closed mills, at a lease cost of only about 35¢ a foot for heated space, attracted many small manufacturers. The

big pool of skilled and semiskilled workers, half of them women, was another inducement. The good shipping facilities helped.

In 1951, a young political sparkplug, John J. Buckley, was elected mayor of Lawrence on a "diversify industry" platform. Through his efforts, the various organizations bidding for new industry merged into a Greater Lawrence Citizens Committee for Industrial Development—underwritten by the city with a three-year budget of \$150,000.

Meanwhile, other local developments helped. Several local groups with investment capital bought abandoned mill buildings and set out to redevelop them for lease to small industry. Banks, which in the textile days had shied away from industrial loans, began putting money into industrial mortgages and into new and expanding companies. And recently businessmen in the area organized Lawrence Industrial Associates, with an initial \$125,000 capitalization, to add risk capital to the banks' investment capital as an inducement to new industry.

• **Present and Future**—As a result of all this, some 30 new plants have opened operations in the Greater Lawrence area in the past two years—not counting one big plant now being constructed by Western Electric Co., Inc. Estimates of how many jobs are being furnished in the new plants vary: The Citizens Committee says 4,000, but Lawrence textile unions say the number actually runs less than 2,000.

It feels some concern about the future of its increasing diversified industry. If business turns downward, some companies might find the going rough.

Mostly, though, the sentiment is summed up in one New Englander's shrewd comment: "We aren't worried about the downs as much as making sure we have more ups."

## REGIONS BRIEFS

Arizona Power Authority is negotiating with the federal government to buy the U. S. Bureau of Reclamation's power-transmission facilities in the state.

Quantity of fish caught in Chesapeake Bay and the adjacent waters of the Atlantic Ocean has fallen off in recent years. Last week, a special commission set up by the Virginia legislature recommended that Virginia, Maryland, and North Carolina jointly undertake research to determine cause and remedy.

New Jersey's Democratic governor-elect, Robert Meyner, will seek the immediate repeal of the state's public utility anti-strike act, he told the annual convention of the state CIO last week.

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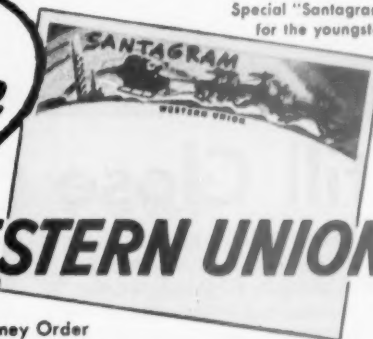
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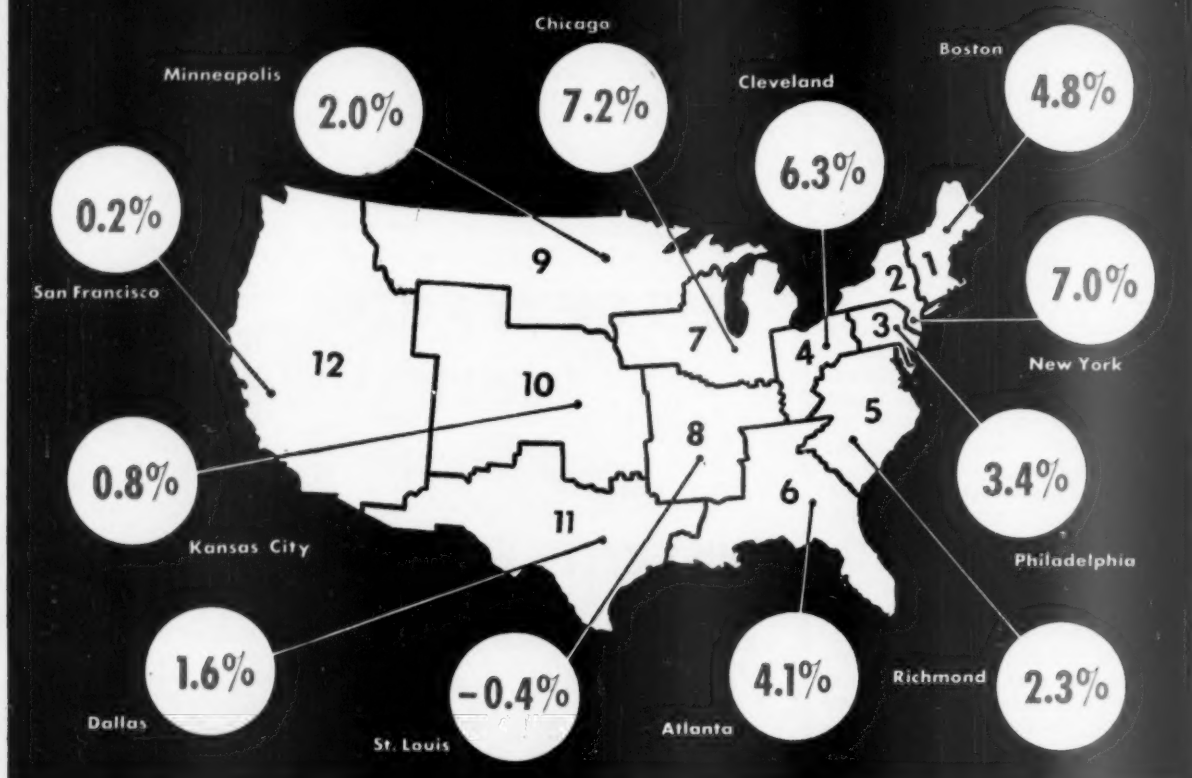
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## The Income Pattern

Business Week's Regional Income Indexes — Percent Gains from Last Year



### The Indexes:

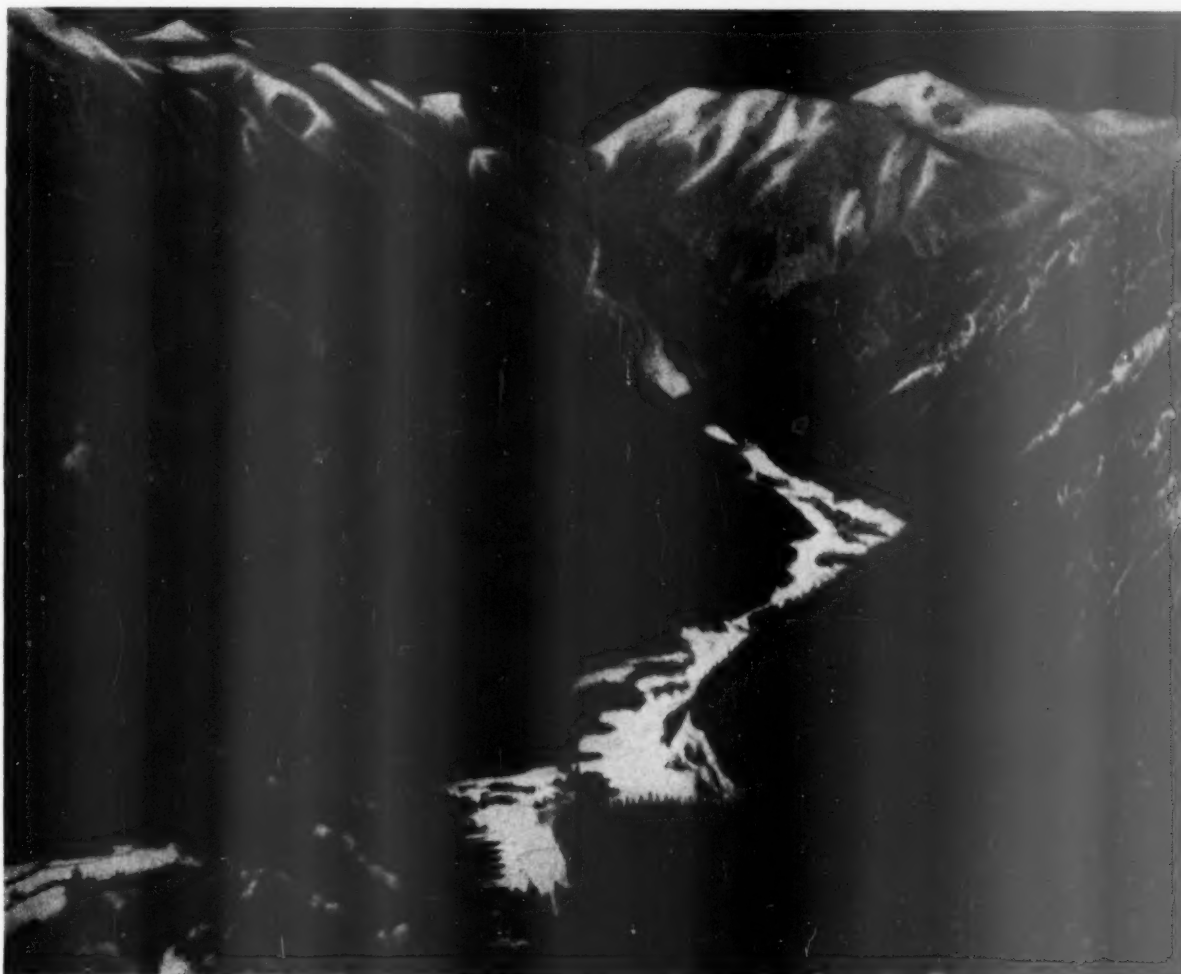
Federal Reserve District	Oct. 1952	Sept. 1953	Oct. 1953	Federal Reserve District	Oct. 1952	Sept. 1953	Oct. 1953
1. Boston	249.6	259.5	261.7	7. Chicago	289.2	307.1	310.0
2. New York	264.1	279.2	282.7	8. St. Louis	298.0	295.9	296.9
3. Philadelphia	264.4	277.7	273.3	9. Minneapolis	307.5	314.0	313.5
4. Cleveland	285.7	305.2	303.7	10. Kansas City	331.0	352.4	353.9
5. Richmond	307.5	317.1	314.6	11. Dallas	395.3	398.1	401.8
6. Atlanta	350.8	363.3	365.3	12. San Francisco	333.8	334.3	334.4
1941 to 100, adjusted for seasonal				U.S. Composite	297.8	308.8	309.9

## Still Close to the Peak

Business is still plenty good. According to the national composite of BUSINESS WEEK's Regional Income Indexes, income in October was up 0.4% from September, and was only a shade under last July's all-time peak.

However, gains over a year ago are steadily getting narrower. Through July of this year, they averaged around 8%. In August, the gain was down to 6.4%; in September, 4.4%; and in October, 4.1%.

One region, St. Louis, showed a 0.4% decline in income from a year ago—the first time this has happened in any region since August, 1952, when business was feeling the aftereffects of the steel strike.



## *From these mountains —1,000,000 JOBS*

All winter long, snow sifts down on the spruce-covered mountains of Canada. A blanket weighing billions of tons. In spring, the rains come . . . and through the summer. Rivulets merge into streams; the streams become raging torrents. This is one of Canada's greatest natural resources — abundant water power.

It is the answer to inexpensive electricity . . . and *low-cost aluminum*. For no other standard industrial process requires so much electricity per unit of output. Almost a fourth of all hydroelectric power generated in the United States is consumed by the aluminum industry. You could light your house for a lifetime with the electricity it takes to make one ton of aluminum.

These mountains, this vast natural watershed, make it possible for our associate company — the Aluminum Company of Canada ("Alcan") — to produce aluminum economically. This aluminum, in turn, helps keep over a million American metal-workers busy. And it adds no power load to the vast U. S. demands — a vital consideration, particularly in drought years.

Those are the economics. The payrolls, the busy foundries and fabricating plants, the thousands of aluminum products for U. S. defense, industry, farm, and home — these are the tangibles that make Canadian aluminum such an important integral part of the North American industrial pattern.



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**HAY** is critically short in drought-ridden Missouri. To save starving livestock, state and federal governments are paying for a long-distance "haylift."



**WATER** is short, too. Above, Army engineers run a pipeline into a lake near the town of Edina. Lake water will fill out town's skimpy supply.

## Drought Trouble in Missouri

The pictures above tell a story of crippling drought—one of the worst in Missouri's history—and frantic measures to avert disaster.

One of the hardest consequences of the drought is that it threatens a \$100-million dairy industry, plus a good many other farming operations throughout the state. Cattle and other animals are starving on dried-out pastures. The

Missouri legislature has voted \$6.5-million to pay the freight costs on shipments of hay from other states. The federal government is helping out, too. So are the railroads that serve the state; they're hauling hay into stricken areas at 50% of regular freight charges. Officials estimate that Missouri will need, in all, about half a million tons of hay to see it through the winter.



# Let's Keep Christ in Christmas

Christmas . . . and

The lights will burn brightly, and the  
bells will ring out;

The streets, and the stores and shops will be filled;  
The gifts will be stacked high under the tree,  
and the festive board heavy under  
the Christmas feast;

There will be merriment in homes throughout  
the land, and the laughter of  
children to infect us all;

The doors of our homes will be open, and friends will  
visit and clasp hands.

*But more than any of these,*

Let each heart become a chapel,

Remembering that on this Day one thousand, nine  
hundred and fifty-three years ago,

God gave to the world the greatest Gift of all,

His only begotten Son,

Our Lord and Saviour Jesus Christ.

Yes, more than anything else,

*Let us remember this, and keep Christ in Christmas.*

## *Norfolk and Western Railway*

# PRODUCTION

## The V-8 Engine Makes the Grade

### Prewar...

These cars led the V-8 parade:

1914  
Cadillac



1932  
Ford



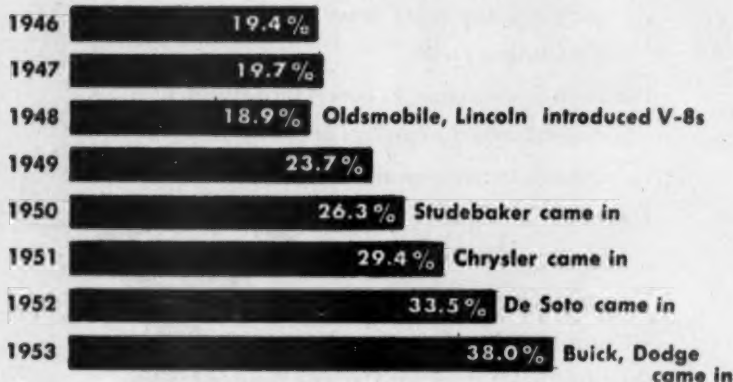
1939  
Mercury



### Since the War...

More and more engines are V-8s

Percent of Total Passenger Car Production



### Next...

Detroit expects these holdouts to fall in line:

- ➡ Pontiac may bring out a V-8 in midyear '54
- ➡ Packard, Chevrolet, and Plymouth look likely for '55 models
- ➡ Hudson, Nash, Willys have made no announcements, though the trade expects V-8s from them in '56 models

Data: Ward's Automotive Reports.

BUSINESS WEEK

As the table at left shows, the V-8 automobile engine took a long time to endear itself to the auto industry. It took much longer than, for instance, the automatic transmission. But now, finally, it looks as though the V-8 is on the point of gaining acceptance by all. It's a pretty safe bet that, by 1956, every major make of car will have at least one V-8 on the market.

The V-8 has been around for a long time. It's a good engine—better, in some respects, than other types of automobile power plant. Why did it take so long to come into its own? Here are the four main reasons:

**Power.** The V-8 is a more compact, rigid engine than its major competitors, the straight-8 and in-line 6. It can withstand the stronger explosions of the new, more powerful gasolines without extensive redesigning.

**Tooling.** Since the V-8 doesn't need heavy adaptation as gasoline gets more powerful, manufacturers feel safer in tooling up to build it. They know that their tools won't be outmoded by the next development in fuel power. This consideration is becoming more important as automation takes over the factories; automatic facilities are expensive, and manufacturers naturally like these facilities to stay in use as long as possible.

**Design.** The dream cars of the future will probably continue the trend toward long, low hoods that curve down in front. The V-8 engine can fit under these hoods without too much crowding. It's neither so high nor so long as the in-line engines.

**Competition.** The public—nudged principally by the advertising of Ford Motor Co.—is coming to believe that the V-8 is the most powerful automobile engine. Not all engineers endorse this belief, but the belief itself is a hard fact that Detroit's selling experts can't ignore. If the public wants V-8 engines, V-8 engines are what Detroit will deliver.

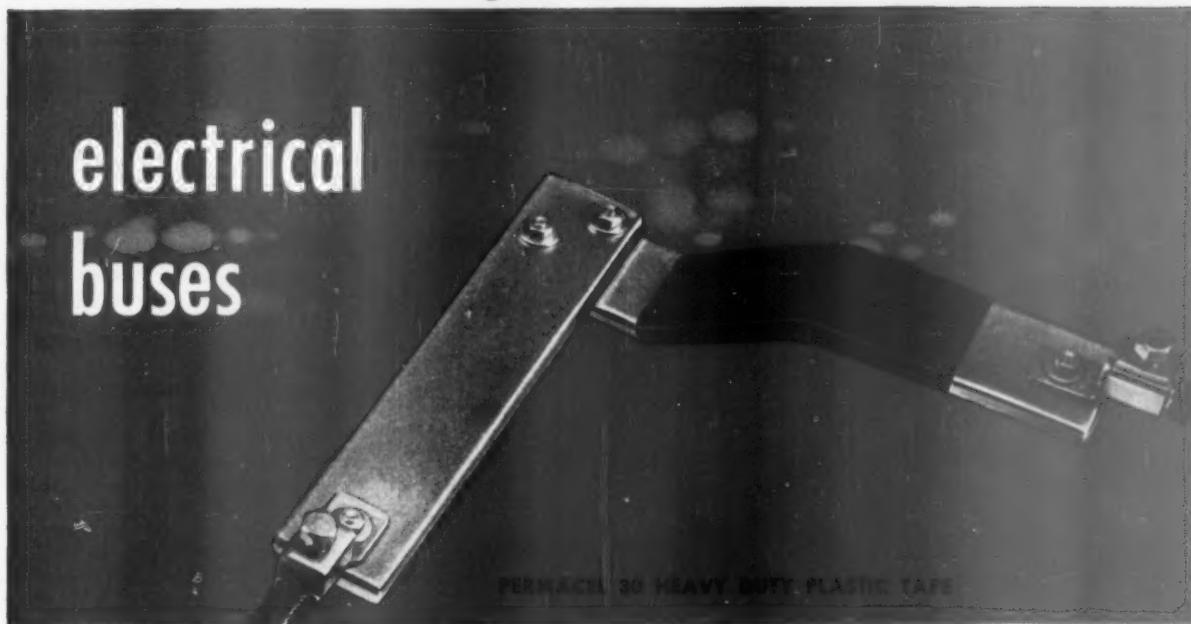
• **Anatomy**—Actually, the in-line engines have everything the V-8 has. The one major difference is in the pattern in which the cylinders are arranged.

The straight-8, for instance, is an in-line engine with eight cylinders. The cylinders are arranged in a single row, like milk bottles lined up one after another along a shelf.

In the V-8, the cylinders are arranged in two rows—four and four. And the cylinders are not vertical, as in the straight-8. Seen from the front of the

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electrical  
buses



or  
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**"... this leaves only Nash, Hudson, and Willys still unaccounted for ..."**

V-8 starts on p. 84

engine, the two rows of cylinders form the shape of a V.

Thus, the V-8 engine can be made shorter from front to back than the in-line engine. And because its cylinders lean over on an angle instead of standing up and down, it's shorter from top to bottom.

• **Progress**—The V-8 began its slow climb to popularity as far back as World War I. Cadillac introduced its first V-8 model in 1914. Ford came out with its first in 1932. Mercury carried V-8s when it first went into production in October, 1938.

Since World War II, one make after another has joined the V-8 club. Pontiac seems to be next on the list. Rumor foresees a V-8 Pontiac at the latest in 1955, perhaps as early as mid-1954. Buick, which had a V-8 in its "50" Super and "70" Roadmaster this year, is expected to carry the V engine in its Special series next year.

Packard, Chevrolet, and Plymouth seem likely to join the fraternity in 1955. This leaves only Nash, Hudson, and Willys unaccounted for. The trade is betting that they, too, will have joined by 1956.

• **Falling Back**—These gains of the V-8 have been chiefly at the expense of the in-line 6. The straight-8 has held its own at about 15% of total passenger car engine output. Other types—four-cylinder, V-12, V-16, twin 6—have seldom snared more than 1% between them since the war.

The in-line 6 began to go out of favor in 1940. In that year, its share of passenger engine output was 66%. This year, it's 50%. In the same two years, the V-8 registered 18% and 38% respectively. While the in-line 6 dropped 16 percentage points, the V-8 rose 20.

Where the cylinders in each engine are roughly the same size, and where other things are about equal, an eight-cylinder engine is more powerful than a six. Power is what the car-buying public seems to want—quicker getaway, faster climb, stronger and surer bursts of speed for passing. That's the main reason for the in-line 6's fall from favor.

As the V-8 trend gains momentum, however, it brings up what could be a troublesome problem: The in-line 6 is a cheaper engine than the V-8. Something will have to replace it so that manufacturers can keep a wide price spread. Engineers right now are playing with the idea of a smaller, lighter V-8.

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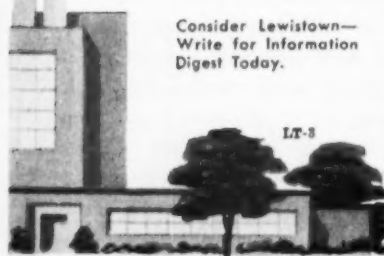
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# Smoke Signal FROM Lewistown TO INDUSTRIES SEEKING A PRACTICAL RELOCATION PLAN

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## When Tape Moves In On TV

Recordings offer big savings in cost and time, gains in quality, for both black-and-white and color. They'll be ready for use in a couple of years.

Commercial tape recording has burst the narrow confines of sound into the much wider fields of vision. That's the real meaning of the recent announcement by Radio Corp. of America that it had harnessed taped recording to television, for both black-and-white and color (BW—Dec. 5 '53, p. 34).

For a long time electronics experts have felt that it was waste of a valuable medium to confine tape recording to speech and music for home and commercial use.

• **Calculators**—They knew that tape was a good repository for storing the arithmetical and measurement figures so dear to the hearts of technical people. This application was first recognized by the makers of electronic computers whose quest for storage devices gave tapes their first industrial market. Now, tapes lay out programs for the calculators, tell them how to do their math. A modified form of tape recording provides the memory that enables the calculator to hold digits in its head while it works out a program.

In TV, tape recordings work much the same way. In either black-and-white or color, the shades of a studio scene—the information—are converted electronically into electrical signals. These are put on a magnetic tape by recording heads. The whole operation is but a single step; this gives tape recordings a big competitive edge over the more complicated kinescope films, which had been poorly suited for TV use from the start because of poor picture quality.

To put the tape recording on the air, you simply run the tape back through the recording machine, which is either hooked onto transmitters for local telecasting, or onto telephone lines to be sent to distant points.

• **Less Costly**—Tape recording has another advantage: In the long run it's cheaper. RCA believes that the cost of tape recording a black-and-white show will be only one-fifth of what it costs to put the show on a movie film. For color TV, tape costs will be one-twentieth of color film.

A tape can be played back almost immediately after recording. With film, there is a time lag while it is developed chemically, and turned from a negative into a positive. After that, film has to be run through a kinescope, which synchronizes the scanning time of the film with the somewhat faster scanning time of the video camera. All this processing

is too slow for such shows as news broadcasts. And usually the picture quality is way below "live" video standards.

Eventually, tape recording will smash the monopoly that film has had in the TV industry—but the time isn't now. Dr. E. W. Engstrom, vice-president of RCA's laboratories division, thinks TV needs another two years of development work before it will be ready for industrywide use. By that time, color TV should be hitting its stride, and it is in color that tape offers the biggest gain.

Later on, the tape's knack for "electronic photography" might move into motion picture theaters and home movies. Still, Hollywood technicians and the film manufacturers show no signs of being worried. E. P. Curtis, an Eastman Kodak vice-president, says that future applications of the tape will be sharply limited. He shrugs off RCA's unveiling of the tape at its Princeton (N.J.) labs as an interesting laboratory showing.

• **Practical Side**—As a matter of fact, tape recording for TV is already out of the lab, in the research sense. If anything, it's product engineering that it needs now. That's because RCA in this case reversed the usual course of electronic engineering: It went for quality first, leaving practical considerations till later. Thus quality of color and picture detail is already just about achieved. There remains the job of improving the recording process, and designing equipment for a mass-production model for the industrial market.

The big technical and physical problem in tape recording for TV is cramming the many bits of information onto the small area of tape. A color TV signal is really five different signals: one for each of the three primary colors—red, green, and blue—an audio signal for speech and music, and a synchronizing signal to control the colors as they appear on the viewer's screen. Black-and-white is simpler, with only three signals: picture, sound, and synchronization.

To get the hodgepodge of signals onto one tape, you have to use tape that's wide enough to act as a four-lane highway. Then you run the tape very fast, to keep the bits of information on any one signal from jamming each other. RCA has done this, but without going to extremes of width or speed.

• **Reel Limits**—Color TV tape is  $\frac{1}{2}$  in.

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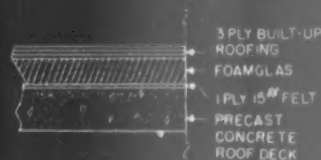
FOAMGLAS for the roofs, walls, floors and ceilings of your buildings. The moisture-proof sealed glass cells of FOAMGLAS assure long, constant insulating efficiency . . . its rigidity and high compressive strength provide excellent structural and load bearing characteristics . . . and FOAMGLAS is fire-proof and rot-proof. To learn how you can best use FOAMGLAS, send for our brand new booklets covering its use for normal temperature buildings, refrigerated structures, piping and equipment. Write now, indicating your specific interest, to Department F-123 . . .

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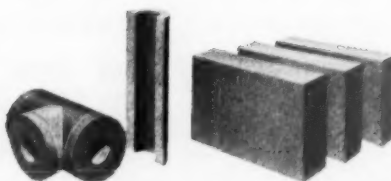
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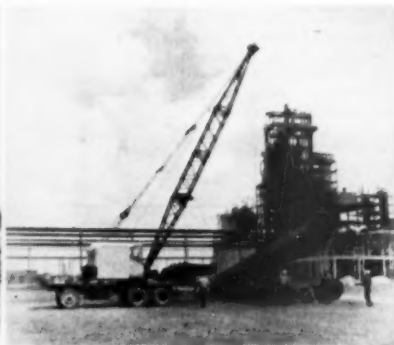
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wide, for black-and-white it's a standard  $\frac{1}{4}$  in. Both types run at 30 ft. per sec., which is 20 times the speed of a conventional sound recorder. This speed creates a drawback: the limited program time from a given reel of tape. Right now, a reel 17 in. in diameter will record about 4 min. of TV time. RCA is working on a 19-in. reel, which would up the time to 15 min.

It's no trick at all for an existing TV station to add a recording unit. As of now, RCA's pilot version would cost about \$150,000. But in two or three years, when the equipment will be coming off the assembly line, the price should be down to a moderate \$50,000. By then, there should be a further bonus in greatly increased playing time from a reel.

Here's the timetable that tape recording will probably follow, once it's commercially established: First, tapes will replace the kinescoping of shows in Hollywood. Later, broadcasters in all time zones will be able to put on big New York shows at the same desirable hours as the original.

The biggest change of all will come from shooting studio shows on tape, instead of broadcasting them live. This will give TV producers more flexibility. They will be able to edit tape just as movie film can be edited, and they will have more leeway in timing network schedules.



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The corset-like garb above is a cooling suit for jet aircraft pilots, made by G. Q. Parachute Co., Ltd., Surrey, England. Even in an air-conditioned cockpit, a jet pilot often needs extra cooling when flying at ultra-high speeds, or in very hot climates. Plugged into an air outlet, the suit supplies air through vein-like tubes to about 100 different parts of the body.



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# New Designs for 1954 Consumer Goods

● Manufacturers expect competition to be fierce, so they've gone to industrial designers for new ideas.

● It's no longer enough in a buyer's market to do only a face-lifting job on the old product. Emphasis is on major remodeling and on entirely new designs.

Manufacturers of consumer goods have done their spadework for a competitive 1954. New and redesigned products are beginning to trickle onto the market; designs are set for most of the year to come. The question: Have manufacturers done enough to claim their share of the consumer dollar? The answer, from industrial designers: Yes.

Industrial designers would be the first to know about the changes in product design. In many cases they started years ago on the 1954 models of consumer goods. Their feeling about the new product lines is borne out by items that are coming on the market—manufacturers are offering something more than a new face on an old idea.

• **Design Planning**—That suits industrial designers just fine. The designer may have come into industrial work as a prettifier of the exterior of a product, but today he's as much a part of the planning function of business as the engineer and the sales director.

In his design he considers the engineering problem, production cost, price range, competition, market potential, uses of a product; he works closely with the engineer who designs the insides. He is the link between the engineer and the consumer.

The industrial designer works way ahead. To him, next year is ancient history. He's thinking now about 1955 and 1956; on some projects, he's into the '60s. But he'll tell you what he thinks about next year: that competition will be fierce, that the consumer item showing up with a mere face-lift is in for a long, lonely wait on the merchant's shelf.

"Face-lifting," says one New York designer, "is like putting a new cover on a book that says nothing new inside. It's not design. It's just a collection of design clichés—and they don't sell."

• **More Bustle**—More and more manufacturers seem to agree. They're taking their problems to industrial designers with ever increasing urgency. According to the Society of Industrial Designers in New York, there has never been so much activity as today.

An officer of the society says of his own big industrial design firm in the Midwest: "We doubled our floor space two years ago and thought that would hold us for at least five years. Now we

find we've got to double again this year."

• **Trends**—Designs for 1954 products are highlighted by (1) new materials, chiefly plastics, that take the place of metals; (2) more simplicity, fewer gadgets and frills; (3) more lavish use of color.

In 1954 you'll still see changes for the sake of changes: the old refrigerator with a new handle, the old clock with a new face. Most manufacturers at some time practice this method of inducing the buyer to regard his present model as obsolete. But in 1954 you'll find modifications going into more major redesign. For example:

• The electric blanket will borrow the contour idea, fit over your mattress the way a contour sheet does. General Electric plans to replace its standard line of electric blankets next year entirely with contours.

• The refrigerator will hold its old shape but get new features. Peter Muller-Munk Associates of Pittsburgh has given Westinghouse refrigerators such selling points as a beverage bin that stores bottles by themselves at a slightly higher temperature than in the food compartment, and a push-button door that opens at a touch of the elbow.

• **New Products**—Entirely new designs are turning up in the market, too. Examples:

A delivery truck of reinforced Fiberglas. United Parcel Service (BW—Nov. 7 '53, p.62) wanted a truck that would be light and easy to maintain. Walter Dorwin Teague Associates designed a body of reinforced plastic, the same material that's going into Chevrolet's Corvette (BW—Jul. 4 '53, p.36).

The body weighs 300 lb. less than a steel one; color is impregnated in the material itself, cutting paint costs to zero. Teague designers think the body, molded in five pieces from plaster molds, can be produced cheaper than steel, but they say the big savings will come in operating costs. Two prototypes are being built by Lunn Laminates, Inc., of Huntington, L. I. They'll be on the streets for tests next month.

A razor with a 40-in. blade. Raymond Loewy has been working on this product for two years. Instead of a packet of blades, you buy a reel of steel 40 in.

long. You insert it in a razor; one edge of the reel serves as the cutting blade. Each time a segment of the edge gets dull, you twist a knob to move a new shaving edge into place. Warner-Hudnut, Inc., the manufacturer, is market-testing the razor in a couple of localities, expects to introduce it nationally during 1954.

A new kind of adhesive tape dispenser. This dispenser has a built-in cutter, eliminating the need for a pair of scissors every time you want a piece of tape. Johnson & Johnson took the problem to Nowland & Schladermundt, New York designers, who took the tape out of its old spool and put it in a plastic container. The cutting edge slides into place with a flick of the thumb. J&J will start casing its entire tape line in the new package next year.

A more versatile paint blender. Some paint stores will get delivery next year on this machine that blends any color on any base (BW—Dec. 12 '53, p.172). It's called the Automatic Color Carousel and it works like this: A customer orders a quart of semigloss in moss green, the salesman twists a few knobs and presses a button, the paint comes out—precise shade, correct base—in a matter of minutes. Standard-Toch Chemicals, Inc., teamed up with designers at Raymond Spilman to develop this device. Earlier paint blenders (BW—Nov. 8 '52, p.87; Jul. 18 '53, p.62) worked only with powders or pastes and certain bases.

• **Long Range**—For the future, designers see more demand for their services. Some are going abroad, designing European products for the U.S. market; others say there's too much to be done right here.

They see a new wave of activity centering around color—not just in TV but in the home, office, and shop. The nature of our times makes people want brighter colors, says one designer.

Some designers say the next big push of product development will come in typewriters and other business machines. Others point to office interiors and talk of integrated sprinkler, air conditioning, and lighting systems.

• **Endless Competition**—Where does it end? The answer, of course, is that it never ends. One designer sums it up this way: "We come up with a fountain pen that solves multiplication problems. It's the hottest thing on the market. Then, in maybe six months, another guy comes along with the same thing—for a buck less. He takes away a chunk of our market. So we go to work again, and this time we come up with a fountain pen that multiplies and also tells you what time it is anywhere in the world. That's what makes this business go."

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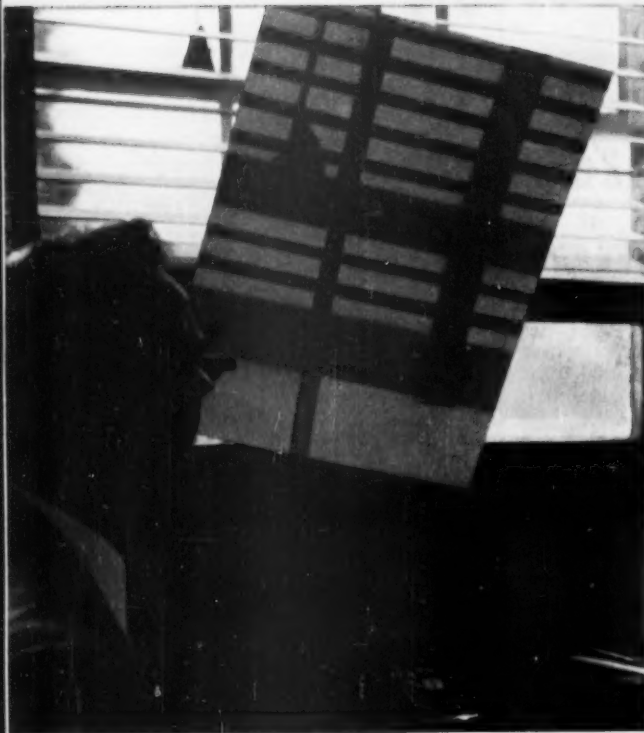
Turn the page for detailed information  
of value to Management, Engineering,  
Production and Purchasing...



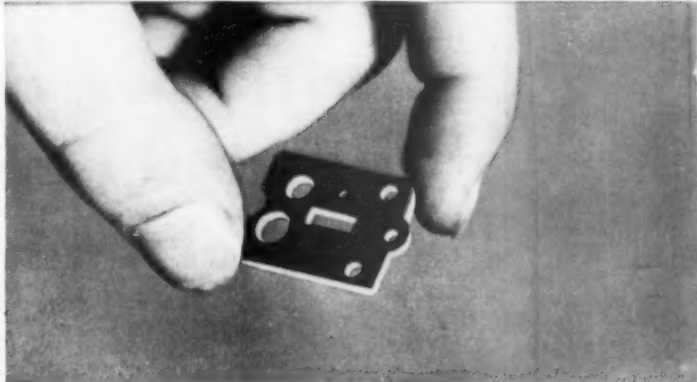
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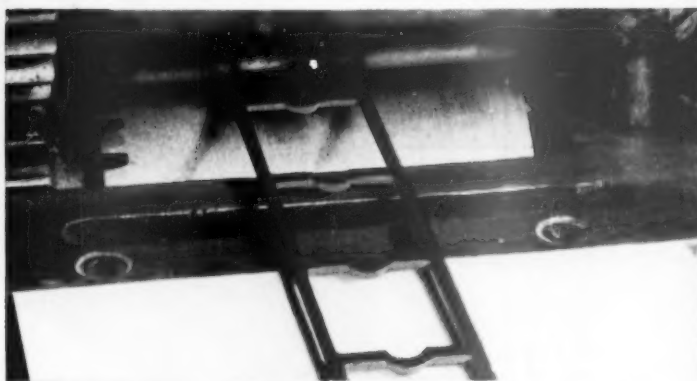
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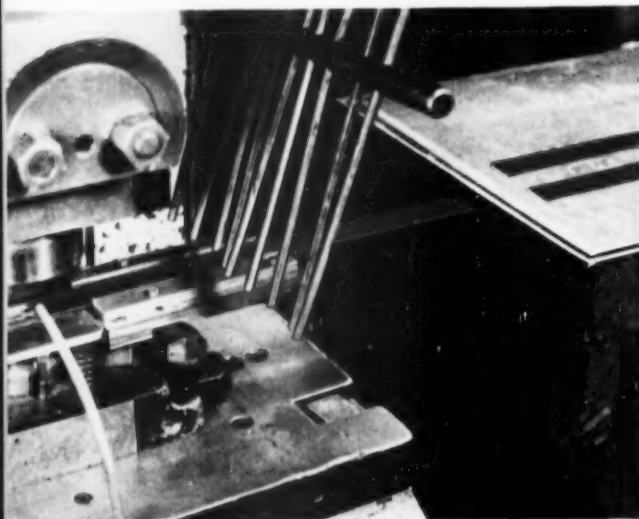
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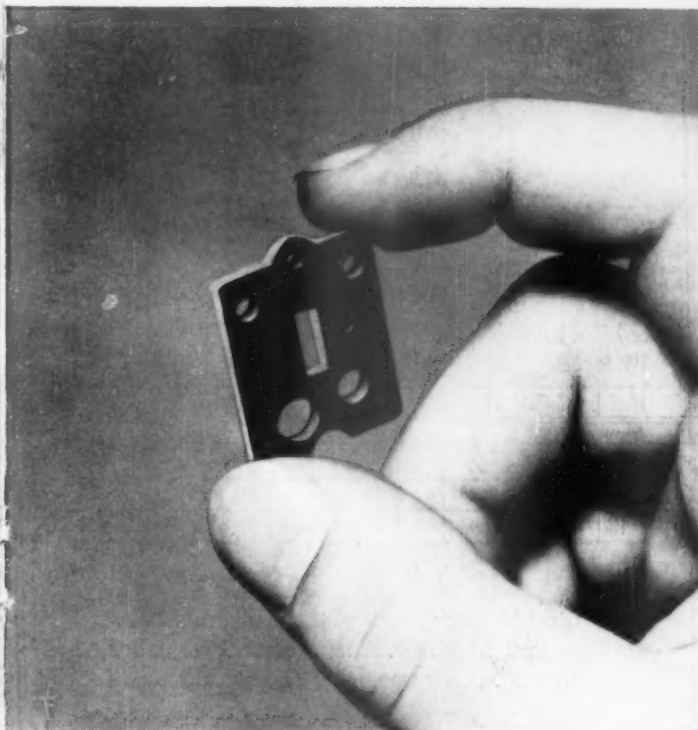
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P	1/8"		1.33*	2.80	13	11	12*	9*	25*	0.55	0.50	M95*																	
PC	3/8"		1.34*	4.00	10	8	10*	8*	22*	0.60	0.55	M75*																	
	3/8"	XP-400	1.31	.70	13	11	12	9	25	0.66	0.62	M80								698	505	62.5	16.0		2	45	GOOD		
XXXP	1/8"		1.30*	1.00	12	10	12*	9*	25*	0.35	0.30	M105*	.030		.035		4.60		4.80		650*	450*	60.0	15.0	20,000*		.8%*		
	1/8"	XXXP-300	1.35	.50	20	17	13	11	40	0.44	0.42	M105	.027	3.0%	.029	5.0%	3.72	4.18	4.75	5.15	800	670	65.+	59.+	300,000	8	40	GOOD	.6%
	1/8"	XXXP-301	1.32	.50	18	14	13	10	31	0.47	0.44	M108	.026	2.7%	.028	6.0%	3.55	4.19	3.84	4.63	920	725	75.+	65.+	300,000 +	34	44	VERY GOOD	.6%

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# Deafness and Industrial Din

**New York Workmen's Compensation Board sets standards on plant noise levels that permanently harm hearing, as a guide in settling claims. But rulings won't go unchallenged.**

Just how loud a factory din can a worker's eardrums take? That has become a pressing question for management as industrial clamor has gone steadily from bad to worse (BW-Oct. 20/51,p56). Last week, the Workmen's Compensation Board of New York State did some trail-blazing when it adopted a set of standards on the relation between deafness and industrial noise to guide it in settling claims.

The board made four key points:

- The danger limit is 90 decibels; clatter ranging from 90 db. to 100 db. may permanently harm the hearing of a few very susceptible people if they're exposed for many years.

- An over-all din of 100 db. to 120 db. for several hours daily over a long period of time can permanently damage hearing of a considerable proportion of workers.

- Most people exposed to noise at levels above 120 db. for several hours daily will suffer permanent damage to their hearing in a matter of months.

- The board will not consider permanent impairment cases until the claimant has been away from his work for six months.

- **Challenged**—The standards, first to be spelled out by a state compensation board, are based on recommendations of a committee of five specialists that spent better than a year studying the problem. But there are already rumblings in scientific circles that indicate the rulings won't go unchallenged.

Some acoustical experts feel the new rules oversimplify the problem. They claim that individual susceptibility to noise and ability to recover from it vary too much to set arbitrary levels. Moreover, the six-month wage loss, and the question of what happens if at the end of that time the claimant has recovered his hearing, are sure to kick up a fuss. Even the decibel itself, a complex measure of power ratios in electrical communications, may get a going-over.

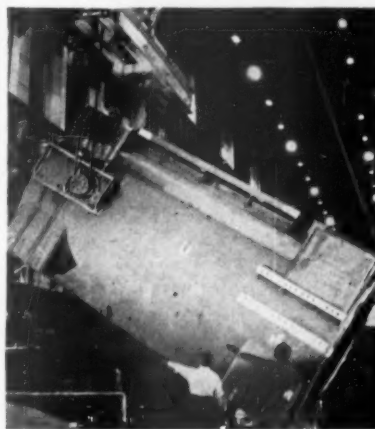
- **Explosive**—The board's painstaking approach in setting the standards—and the guarded don't-quote-me attitude in scientific circles—indicate just how ticklish the noise hazard problem has become. Despite the fact that many companies have moved to muffle their noisiest machines, emotions have come close to the breaking point in the last few years. Mass hysteria could easily return the silicosis scares of the past.

Permanent and temporary deafness

cases have hit the courts in many states. One Wisconsin company reportedly has over 100 cases stacked up against it. Over \$5-million of compensation claims have been filed against a company in New Jersey. Jobs notorious for racket—such as riveting, drop forging—could add up to a potential claim figure of \$2-billion for the U.S.

Doctors, engineers, and scientists have been taking stabs at the noise problem for years, but the more they dig into it the more nebulous it seems to become. American Standards Assn. and Acoustical Society of America have been actively tackling the matter since 1932 (BW-Oct.31/53,p82). So far, they have come up with a batch of standards for sound testing equipment. Right now special committees are working on dozens of related projects.

The next move will be up to industry. American Standards will publish its long-awaited report to management around the first of the year. Heart of the report will be a series of 20 graphs based on data supplied by industries with a noise problem. By studying the graphs, management will be able to estimate the probable hearing loss of a group of individuals exposed to a certain type of noise over a given period of time. Then it can concentrate on finding a remedy.



## Turbine Juggling

This huge part being machined at General Electric Co. in Schenectady will go into a 114,000-lb. stator for a turbine generator. The 99,000-kw. unit is the first of two GE is supplying the West Terra Haute station of Public Service Co. of Indiana.



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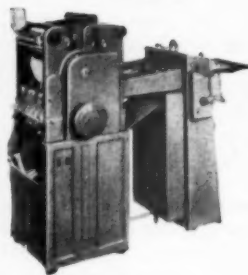
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Charles and Lombard Sts.  
**BIRMINGHAM 5**  
Pump Shop, Inc.  
1015 Seventh Ave. So.  
**BOISE**  
Olson Mfg. Co.  
4000 Warm Springs Ave.  
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Somerville, Mass.  
Hayes Pump & Machinery Co.  
100 Vine Street  
**BUFFALO 10**  
Rust, Neal Co.  
64 Pinbody Street  
**CHARLOTTE, N.C.**  
Southern Pump & Tank Co.  
1730 H. Tryon St.

**CINCINNATI 2**  
Wm. T. Johnston Co.  
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**DENVER 14**  
Eaton Metal Product Co.  
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**DENVER 17**  
Hendrie-Balchoff Co.  
1675 Seventeenth St.  
**DETROIT 26**  
Kerr Machinery Co.  
Kerr Building  
**EL PASO, Texas**  
Geo. S. Thompson Co.  
611 N. Campbell St.  
Also Phoenix, Arizona  
**EVANSVILLE 8, Indiana**  
Shoebill Machinery Co.  
222 Court Bldg.  
**HOBS, New Mexico**  
Union Supply Co.  
Also Artesia, New Mexico  
**HOUSTON 1**  
Southern Engine & Pump Co.  
906-910 St. Charles Street  
Branches: Dallas, San Antonio,  
El Paso and El Paso  
**LOUISVILLE 7**  
Neil La Valle Supply Co.  
505 W. Main Street  
**SMARSHFIELD, Wis.**  
Feller Bros. Co.

**MEMPHIS 3**  
E. C. Backstone Co.  
600 Madison Ave.  
**MINNEAPOLIS 3**  
Reed Harp  
1500 Hennepin Ave.  
**NEW ORLEANS 12**  
Menge Pump & Mch. Co.  
549 Dryades Street  
**ROBESIA, Texas**  
W. L. Sommer Co., Inc.  
P. O. Box 1626  
**PHILADELPHIA 38**  
W. H. Logan Co., Inc.  
2136-18 Fairmount Avenue  
**PITTSBURGH 22**  
Power Equipment Co.  
Oliver Building  
**RICHMOND**  
O'Neill Pump & Engr. Co.  
601 E. Franklin St.  
**SALT LAKE CITY 1**  
Utility Engr. Co.  
630 Dooly Bldg.  
**SAN FRANCISCO 8**  
De Lard Pacific Co.  
61 Boan Street  
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**ST. LOUIS 1**  
Lane Machinery Co.  
Seventh and Market Street  
**TULSA 5**  
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414 So. Detroit Ave.



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**VIKING** PUMP COMPANY  
CEDAR FALLS, IOWA

See Our  
Catalog in  
SWEETS

## PRODUCTION BRIEFS

**Versatile silicones:** The use of small quantities of silicone fluids in auto polishes has enabled polish manufacturers to triple sales since 1949, according to an announcement from General Electric Co. Now GE sees an equally rosy future in blending silicone fluids with cosmetic products to make them more water repellent.

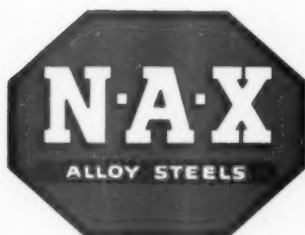
**Construction industry** has just passed the auto industry as the nation's No. 1 direct purchaser of steel products, according to Engineering News-Record, a McGraw-Hill publication. Since production of cars and trucks is expected to be lower next year, construction has a good chance of holding the top spot all through 1954.

**Taconite mining** got another big boost in Minnesota last week. Eric Mining Co., which built a large experimental plant at Aurora in 1948, is now clearing ground for a plant and harbor facilities that may eventually handle 10½-million tons of taconite (low-grade iron ore) pellets a year. Two other important taconite developments are under way in Minnesota. Oliver Iron Mining division of U. S. Steel Corp. is operating a pilot plant at Mountain Iron; and Reserve Mining Co. is building a harbor, processing plant, and town near Beaver Bay.

**Biggest air conditioning system** ever installed as one project in an existing building (in other words, not built with the building) will go into Fidelity Philadelphia Trust Building. The year-round system will have a cooling capacity equal to 5-million lb. of ice melting daily. Carrier Corp., which landed the contract, says the previous record for complete systems in existing buildings was set six months ago in the Chicago building of Standard Oil Co. (Indiana).

**Plant expansions:** GE plans to build a plant and headquarters at Holland, Mich., for its Hermetic Motor Dept. . . . A new monomer, vinyltoluene, for use by the paint industry, is in full production at a new Dow Chemical Co. plant in Midland, Mich.

**Borolites** (combinations of boron with such metals as zirconium, chromium, and molybdenum) seem headed for top importance in the atomic age. They withstand very high temperatures, and are not critically scarce. Firth Sterling, Inc., American Electro Metal Corp., and Carborundum Co. have just formed Borolite Corp., to concentrate funds and facilities of their hitherto separate research on high-temperature materials. Headquarters is in Niagara Falls, N. Y.



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► **N-A-X HIGH-TENSILE** steel—a low-alloy high strength structural steel used to reduce weight and increase life of your product.

► **N-A-X AC 9115** steel—for gas turbines and similar products requiring strength of material when operated at higher than normal temperatures up to 1000° F.

► **N-A-X 9100** series—alloy steels for carburizing and heat treated parts. With these three N-A-X ALLOY STEELS, we offer time proven products to economically serve you.

N-A-X HIGH-TENSILE is 50% stronger than mild carbon steel with high notch toughness. Has excellent cold forming and welding properties and greater resistance to atmospheric corrosion and abrasion.

N-A-X AC 9115—a steel easily fabricated and welded by any method, maintains high strength at elevated temperatures up to 1000° F. When protected against high temperature oxidation by proper coatings, it is a worthy alternate for the higher-alloy stainless type steels for this application.

N-A-X 9100 series—a series of alloy steels with the alloying elements constant within an established range, with carbon varied to suit the hardenability and hardness desired. An outstanding carburizing steel.

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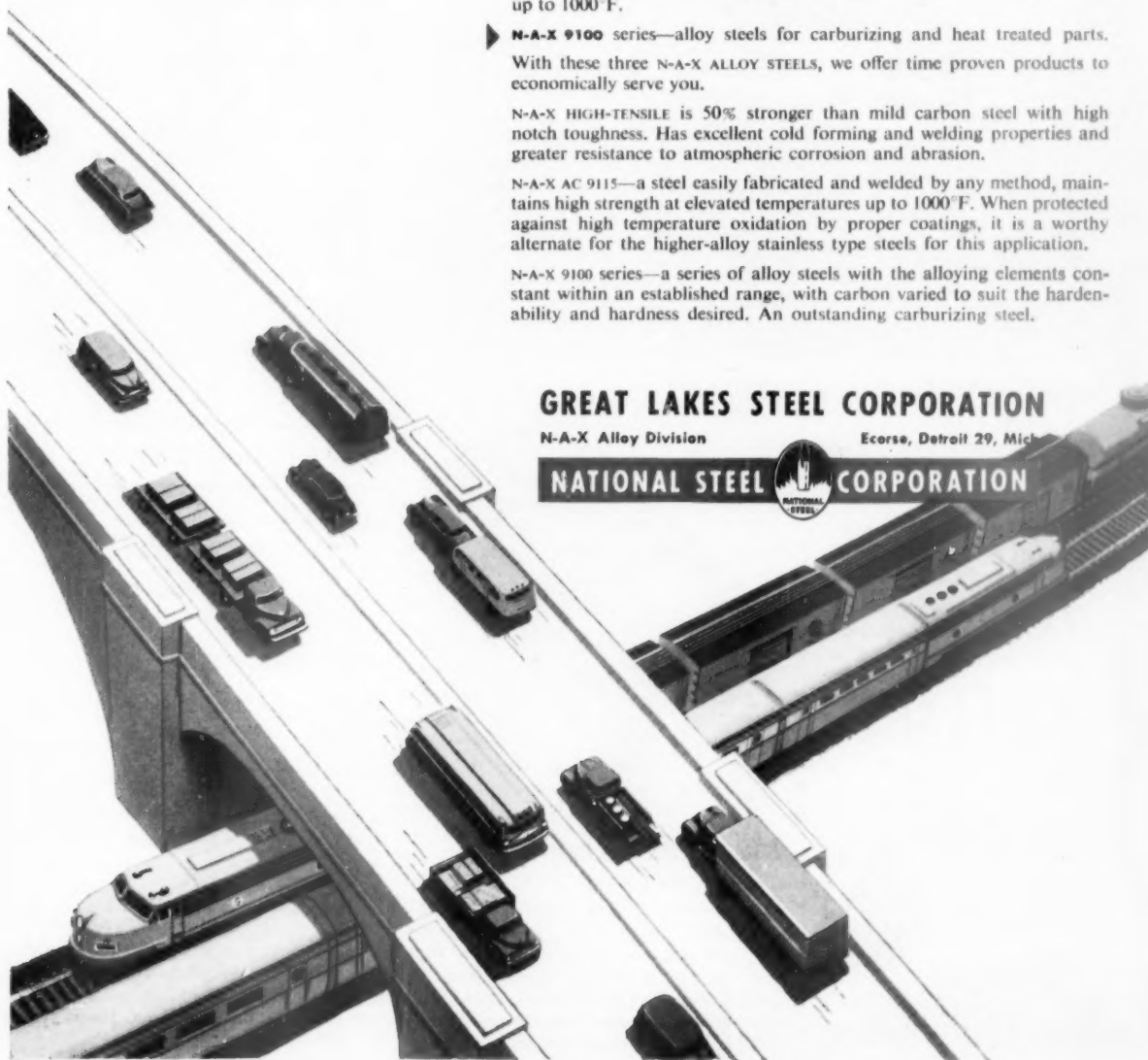
N-A-X Alloy Division

Ecorse, Detroit 29, Mich.

NATIONAL STEEL



CORPORATION



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pressure, flow  
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instruments are  
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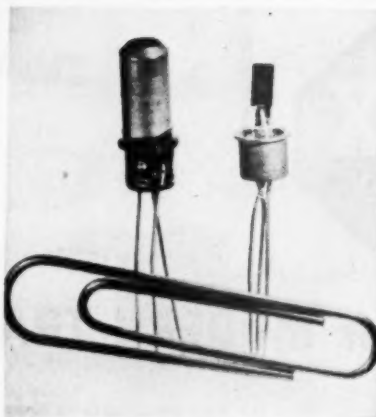
Factories  
Sellersville, Pa.  
East Moline, Ill.

Mines  
Philipsburg, Mont.



**9** closely knit divisions

## NEW PRODUCTS



### Silent Transistor

Newest development in the electronic industry's scramble to build a better transistor comes from Philco Corp. One problem has been to find a transistor that could replace the tube in your radio; it has been a frustrating problem because it's the nature of a transistor to create a lot of noise in the set. Philco claims its new "surface barrier" transistor (above) fills the bill. It could have military usefulness, too: Because it can operate on two flashlight batteries, it makes the walkie-talkie lighter, easier to carry.

• Source: Philco Corp., Philadelphia, Pa.



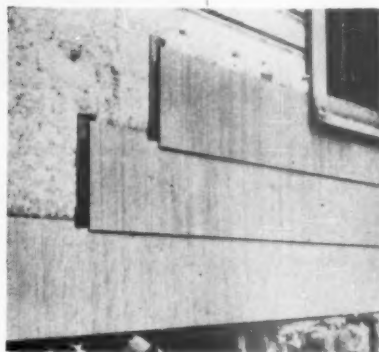
### Music on Wheels

Quality sound reproduction has always been a problem for transportation companies. That may be the reason why you had no background music the last time you traveled by train, plane, or bus. Now the manufacturers of this new magnetic tape reproducer, called ABP-12, think they have the solution.

The device is designed to play smoothly under bumpy conditions. Plays two hours before repeating. Weight: 27 lb.

• Source: Presto Recording Corp., P. O. Box 500, Paramus, N. J.

• Price: \$437.



### Building Blanket

This old wall is getting a coat of Fiberglas Side Cushion, a 4-in.-thick insulating underlay that weighs about 3 lb. per 100 sq. ft. This is the first time glass fiber has been used as insulation on the exterior of a building. Doing it the old way, you hired a man and some blowing equipment to pack glass particles into the wall cavities. The siding comes in 200-ft. rolls, goes on the wall with either nails or staples; on top of it goes the outer siding.


• Source: Owens-Corning Fiberglas Corp., Toledo 1, Ohio.

## NEW PRODUCTS BRIEFS

**Rubber toughener:** To give longer life to rubber conveyor belts, Raybestos-Manhattan, Inc., Passaic, N. J., is adding a new ingredient called "XDC" to the rubber. It's supposed to give rubber conveyors greater resistance to abrasion and tearing.

**Titanium locknuts** are going into some Republic Aviation Corp. planes. Because they weigh about half as much as comparable steel parts, Republic estimates this single substitution decreases a plane's weight by 213 lb. Manufacturer is Elastic Stop Nut Corp. of America, Union, N. J.

**Repeat-O-Mask** is a new entry in the spoken dictation boom (BW-Nov. 7 '53, p. 94). The new microphone-mask lets the stenographer breathe right through it. Manufacturer is Voice Reporting Co., 38 Park Row, New York 38, N. Y.

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**MAGNESIUM**, *the world's lightest structural metal,*  
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This luxurious aircraft has been described as the fastest piston-powered commercial airliner in the world today. Its superior range and speed make possible new trans-continental and transoceanic non-stop schedules that are faster than existing services provided by any other aircraft. To the Douglas Aircraft Company, designers and manufacturers of the DC-7, and American Airlines, first to operate the DC-7 non-stop coast-to-coast, The Dow Chemical Company would like to extend its heartiest congratulations! Dow, major producer of magnesium, the

world's lightest structural metal, takes pride that Douglas engineers specified the use of magnesium sheet and extrusions for the flap-vanes, floor beams and many other vital parts of the DC-7. Dow is pleased, too, that Douglas, like most other aircraft and airframe builders, relies on the use of magnesium in its varied forms to help solve many other weight and strength problems.

For the answer to your questions on magnesium, write to the Magnesium Department, THE DOW CHEMICAL COMPANY, Midland, Michigan.

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## NAMES & FACES



Tobacco chief Joseph Kolodny:



"Sure, I'm a showman . . .



but a despot, no . . .



You can't run a group . . .



for long with brass knuckles . . .



You have to persuade . . .



not intimidate . . .



to win what you want . . .



Now tell me I'm wrong."

## Where There's Smoke, There's Kolodny

In the 21 years since he hatched the National Assn. of Tobacco Distributors and tucked it under his wing, Joseph Kolodny has often been treated with affection, frequently with disdain, but almost never with indifference. One of the many stories about him perhaps indicates why:

During the early days of NATD, Kolodny made persistent attempts at getting one of the major Midwest wholesalers to join his group. He had

little success, and, in fact, the distributor became a rallying point for those opposing the trade organization.

One Saturday morning, Kolodny walked into the distributor's office and asked to see him. The answer was a polite, but firm, no. He then tried sending in a note, saying he had come all the way from New York for a chance to talk to the wholesaler. The answer this time was that the gentleman didn't care if he had come all the way from

Europe, he still wasn't going to see him.

This rankled Kolodny, and brushing past the secretary, he marched into the inner office.

"My name is Joseph Kolodny," he said. "I was born in Poland and I'm a naturalized citizen of the United States. I happen to be sufficiently bullheaded to believe that we can organize the tobacco distributors. We need you in the organization. But I've been told

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most important  
use today?



**T**HIS may come as something of a surprise to you . . . but 65 different types of business, thousands of concerns, are now using Recordak Microfilming *primarily* to end costly manual record-keeping in their daily routines. *Routines which are undoubtedly similar to some of yours.*

The way Recordak Microfilming cuts record-keeping costs as much as 85% is little short of amazing.

In just one minute a Recordak Bantam Microfilmer (below) will give you copies of more than 500 check-size documents or 250 letter-size ones. And each copy is photographically accurate and complete . . . yours for a fraction of a cent.



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Billing Clerks are able to handle 4 times as many accounts

Inventories are taken at  $\frac{1}{8}$  the usual cost

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He has thousands of case histories at his fingertips . . . and the chances are good he can point to companies of your type and size who are now using Recordak Microfilming most profitably. In addition, he'll leave you all the facts on the complete line of Recordak Microfilms designed for all requirements, all budgets . . . *and available on an attractive purchase or rental basis.*

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## faster machining . . . no smoke . . . no skin irritation

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It's safe for workers' skin!

Lusol in pH tests (tests of mildness) proved milder than toilet soap. Workers even wash their hands in it!

Prove-in Lusol on one of your machines. Give it a tough test. For eight years Lusol has been successful on even the most difficult prove-in trials.

Write for "Lusol Gets to the Point", a booklet describing Lusol, what it does and how it works in all types of machines in hundreds of machine shops.



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**Box 222 • Portland, Conn.**

you won't join for two specific reasons: (1) You don't like foreigners; (2) you don't like people with accents. If those are your only reasons, then you can stay out. If they're not, then I'm here to find out the real reasons, if any."

At this point, so the story goes, there was a moment of silence. Finally, the distributor rose and, choosing his words carefully, told Kolodny that "any so-and-so who has the temerity to talk to me like that in my own office must have something to sell. Sit down."

Kolodny sat. Before he got up again, he had enrolled the wholesaler in NATD, had extracted a \$1,000 check from him for the organization, and had won a lasting partisan for NATD's cause.

• **Whatever Else, a Power**—Kolodny's "temerity" and his penchant for the dramatic are two reasons—though not the only ones—why he is looked upon with somewhat mixed feelings in the tobacco industry. There are people who tend to dismiss him as a "circus performer." Others label him as a despot, both with and without the "benevolent" qualification. Still others find him a sincere idealist and "an influence for the good with countless thousands . . . but especially those engaged in the tobacco industry." This last is the opinion of the Junior Executive Division of NATD, which immortalized its esteem in one of the several testimonials that Kolodny keeps in and around his office.

Regardless of their disagreements about Kolodny the person, though, people who come into contact with him generally find one point of agreement: Within the pasture he has fenced out for himself, the man is a power. As one person who knows him well says: "Whether you praise him or damn him, you still have to reckon with him if you're in the business of selling tobacco."

## I. The Open Mouth

Now age 51, Kolodny has been a force to reckon with in tobacco for most of his adult life. He has, in fact, become known as "Mr. Tobacco," a label that Kolodny feels "doesn't mean much," but one that has nevertheless stuck—with the help of some energetic press-agentry.

Kolodny's official title is managing director of the National Assn. of Tobacco Distributors. As such, he is the operating chief of a trade group that speaks for 1,257 wholesalers. Lumped together, they do about \$5-billion worth of business a year and account for roughly 85% of the wholesale tobacco volume in the U.S. In addition, they handle the products of 51 industries whose goods move through tobacco

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*Your solution is a  
**FIBRETONE\***  
Acoustical Ceiling!*

Johns-Manville, the pioneer in sound control,  
recommends Fibretone Acoustical Panels  
to reduce disturbing noise at low cost



**Fibretone Panels**  
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BECAUSE DISTRACTING NOISE is so harmful to efficient business operation, practically all new building specifications include acoustical ceilings for sound absorption. However, just because your present building was constructed before sound control became an established science, there is no reason for you to be handicapped by noise. You can have a Johns-Manville Acoustical Ceiling quickly installed over your present ceiling.

Johns-Manville FIBRETONE offers an acoustical ceiling which is highly efficient yet modest in cost. It consists of 12" square panels of sound-absorbing materials in which hundreds of small holes have been drilled. These

holes act as "noise-traps" where sound energy is dissipated. Fibretone is pre-decorated, can be painted and repainted, and is available with a flame-resistant finish.

Other J-M Acoustical Ceilings include *Permacoustic\**, a textured noncombustible tile with great architectural appeal; *Transite\**, perforated acoustical panels; and *Sanacoustic\**, perforated metal panels backed with a noncombustible, sound-absorbing element.

For a complete survey by a J-M acoustical expert, or for a free book entitled "Sound Control," write Johns-Manville, Box 158, Dept. BW, New York 16, N. Y. In Canada, write 199 Bay Street, Toronto 1, Ontario.

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retailers. Since Kolodny is the first and only managing director of NATD, its voice from the beginning has come from the mouth of "Big Joe."

• **Up the Ladder**—A balding, stocky man who gesticulates freely, Kolodny still speaks with a European accent. His vocabulary is on the flowery side, and even in conversation he is apt to give the impression that he is making a speech. This is probably due to the fact that he makes about 150 speeches a year and has kept an open mouth through most of the years since he arrived here.

Kolodny was 19 when he left Poland and arrived in the U.S. He began working—as a \$2.50-a-week errand boy—and almost immediately started at night school. In a hurry, he went to two high schools at once, did four years' work in two. He joined a fraternal organization and six months later was its paid secretary, "because I talked so much at meetings."

In 1925, Kolodny took a job as an order picker—a man who breaks up bulk shipments for distribution to retailers—at Jersey City Tobacco Co., a New Jersey wholesaler. Seven years later, he had become its principal owner and president. Kolodny still runs the company, managing to do it by splitting a 12-hour to 14-hour workday between the office and NATD. The business, he says, is an "intermediate one," grossing in the neighborhood of \$5-million a year.

• **Birth of NATD**—In his book, 4,000 Years of Service (Farrar, Straus & Young, 1953), Kolodny recalls that as early as 1930 he began to advocate a national association of tobacco distributors.

The situation then, he writes, looked "pretty hopeless. Rules of fair competition were in the main disregarded; businessmen suspected and distrusted each other. . . . The wholesaler existed in a state of perpetual crisis."

For two years, Kolodny worked to persuade distributors to band together to meet this crisis. The going was slow; previous attempts at forming a trade group had failed, and there was still strong opposition to the idea. Not until June, 1932, did 51 wholesalers join together in Cleveland to make NATD a reality.

The association grew quickly after that. Within a few months, more than 200 distributors had signed up. Kolodny, from the outset, assumed the responsibility for administration, and one of his early moves was to push through an NRA code of fair competition.

When the code authority was set up, he became chairman. Later the association entered the fight for state fair trade laws and unfair practices acts and began a campaign, which continues



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It takes a delicate touch and years of experience to master the art of formulating and processing certain types of steels ... like those used in fine cutlery, clock springs and TV magnets. These and hundreds of other specialty steels must be tailored to fit their ultimate use. For example, the cold rolled alloy steels needed for cutting such everyday items as bread, meat, paper, shoe leather and fabrics have to possess special qualities not found in ordinary steels.

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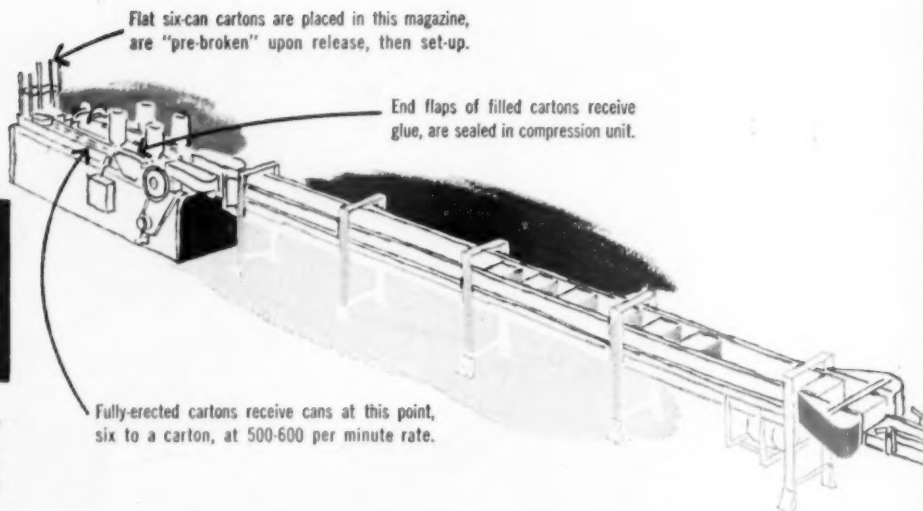
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CRUCIBLE STEEL COMPANY OF AMERICA, GENERAL SALES OFFICES, OLIVER BUILDING, PITTSBURGH, PA.

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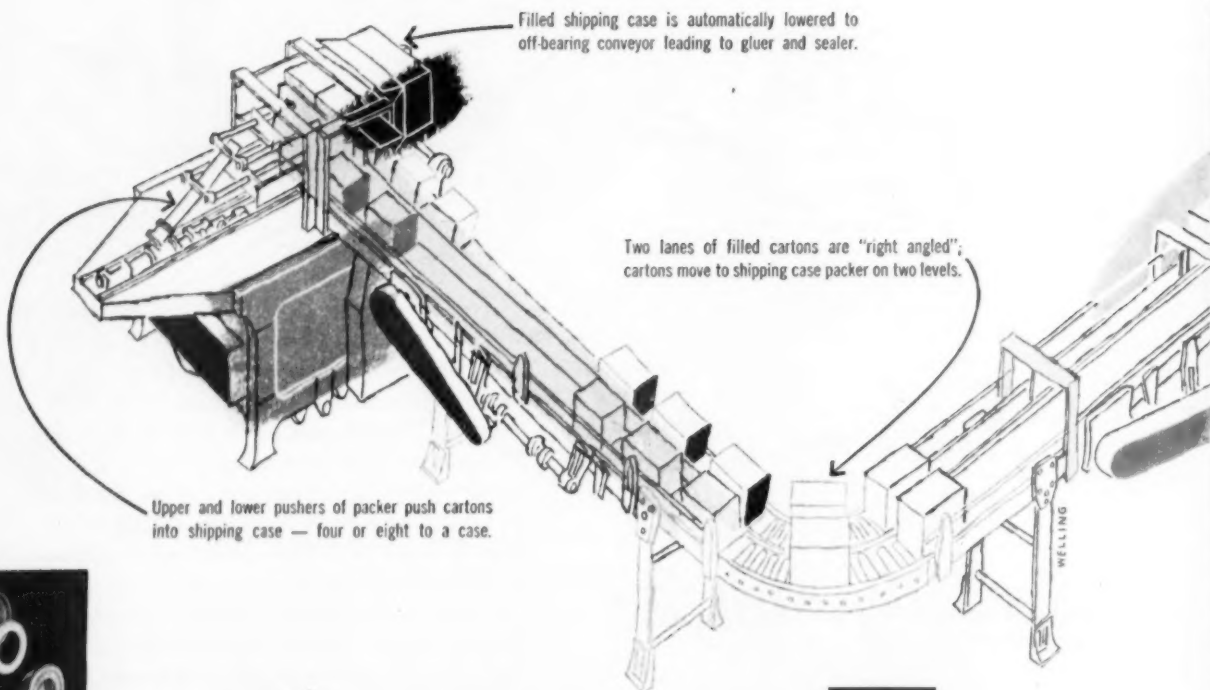
Part of a complete line of equipment for glass manufacturing, Hartford-Empire I. S. Machine forms bottles and jars at high speeds, to highest quality standards.



Flat six-can cartons are placed in this magazine, are "pre-broken" upon release, then set-up.

End flaps of filled cartons receive glue, are sealed in compression unit.

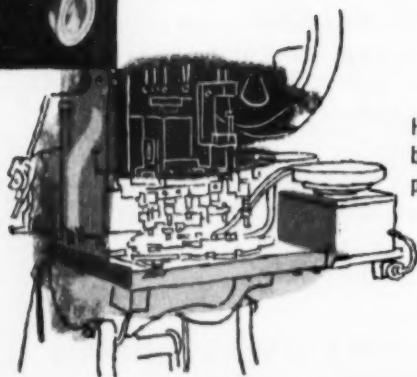
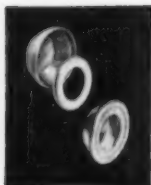
Fully-erected cartons receive cans at this point, six to a carton, at 500-600 per minute rate.



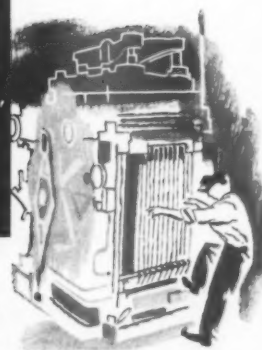
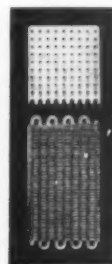
Filled shipping case is automatically lowered to off-bearing conveyor leading to gluer and sealer.

Two lanes of filled cartons are "right angled"; cartons move to shipping case packer on two levels.

Upper and lower pushers of packer push cartons into shipping case — four or eight to a case.



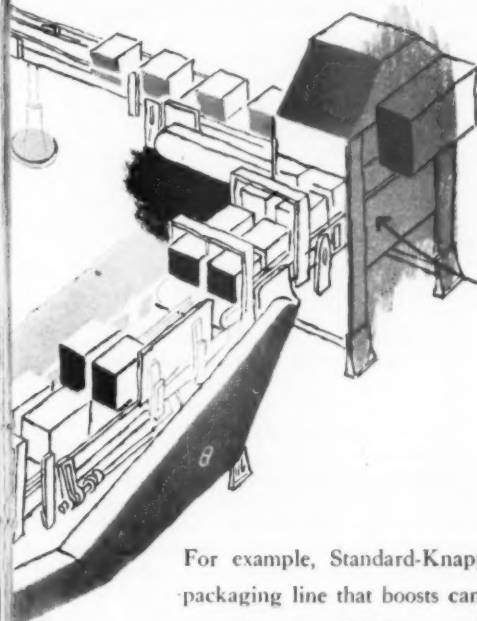
Hopper-fed press, built and tooled by V & O, assembles two components at 65 pieces per minute.



Henry & Wright Dieing Machine stamps out fins, assembles them onto tubes, delivers complete condenser cores.

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methods available through Emhart companies*



Filled cartons are conveyed single file to collector, which releases them in two's at right angle to original line of flow.

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All Emhart divisions offer equal talents for improving techniques. V & O builds and tools power presses that combine tricky assembly jobs into low cost, automated operations. Metal stampings — in both light and heavy gauges — drop radically in cost when produced on high speed Henry & Wright Dieing Machines. If you make glass products, Hartford-Empire can provide complete equipment and services for improved methods.

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| <input type="checkbox"/> Rinsers             | <input type="checkbox"/> Labelers                        |
| <input type="checkbox"/> Cartoners           | <input type="checkbox"/> Case Cleaners                   |
| <input type="checkbox"/> Gluers &<br>Sealers | <input type="checkbox"/> Palletizers &<br>De-palletizers |

### METAL WORKING

- ☐ Henry & Wright Dieing Machines  
☐ Henry & Wright "Press Load  
Calculations"  
☐ Henry & Wright Case Histories  
☐ V & O Inclined Presses  
☐ V & O Notching Presses  
☐ V & O Roll and Dial Feeds  
☐ V & O Feed-O-Matic

NAME \_\_\_\_\_  
TITLE \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY & STATE \_\_\_\_\_

## H. C. Price Pipelines in Bolex 3-D movies



*Bolex 3-D movies for tough industrial jobs*

**D**URING the summer of 1953, H. C. Price Co. of Bartlesville, Oklahoma, constructed pipelines for four major companies: Tennessee Gas Transmission Co., Southern Natural Gas Co., Texas Gas Transmission Corp., and Gulf Interstate Gas Co. It was decided to make the first 3-D pipeline movie about these four projects, for seldom has one pipeline firm worked on so many big jobs at one time.

Mr. Joe D. Price says:

"When making movies in the past we were limited to a lateral motion across the screen. Any forward movement was hard to portray because with a 'flat' projection the image only grew in size on the screen. Now, with 3-D the forward motion is not left up to the imagination; the eye actually sees the movement as it progresses toward the viewer. Bolex 3-D enabled us to show pipelining in its true form—with its ever forward movement. At the Gas Association convention the audience was most enthusiastic leaving little doubt that our initial 3-D venture

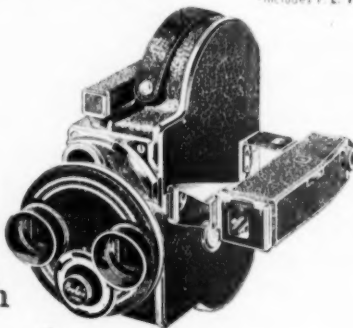
had been most successful, and Bolex 3-D has proved itself an effective medium for the presentation of a difficult industrial subject."

*For information on making Bolex 3-D industrial movies, see your Bolex Franchised Dealer, or write: Paillard Products, Inc., 100 Sixth Avenue New York 13, N. Y. Outside U. S. write Paillard, S. A., Ste. Croix, Switz.*

*Bolex Stereo System complete with Bolex H-16 DeLuxe camera, taking and projector lenses, screen, two pairs Polaroid glasses and Close-up Attachment (as shown).*

*\$783.00\**

*\*includes F. E. T.*



**Tell a REAL Story with**

# Bolex® Stereo

**16mm Industrial Movies**

today, against what it considers unjust taxes on tobacco products.

## II. Trade Chief and Cop

There is no question that NATD, as it stands today, is mainly Kolodny's making. But it is not, he says emphatically, the handwork of a benevolent dictator.

"I can see how some people can misconstrue my role," he says. "And I admit that at times I may be overbearing, perhaps annoyingly so. But if I now and then take a brass-knuckles approach, it's only because I feel so strongly about the need to face facts—that there's enough business here to take care of everybody and no reason for unethical practices."

Kolodny himself has supplied ample evidence that at times his knuckles do, indeed, have a metallic ring. For instance, there is the story of how he called a meeting of cigar manufacturers to try to do something about declining sales. "Come yourselves," he told them, "don't send me any vice-presidents."

When the manufacturers came, he outlined a \$100,000 campaign to promote cigars, set the amount each would contribute, and promised that NATD would match that amount. When a manufacturer asked, "How will the distributors feel about that?" he answered, "The distributors will like it because Kolodny likes it."

• **Police Power**—Kolodny maintains that in policing the trade practices of NATD members his only powers are those of persuasion and education. Admittedly, these can be fairly strong, when coupled with a threat of censure by the association. However, he specifically denies accounts of having brought pressure on distributors through the manufacturers. There is no truth, he says, in stories that he has suggested to manufacturers that they shift supplies away from a wholesaler who has been playing with his own set of rules, rather than NATD's.

On numerous occasions, and Kolodny admits these freely, he has reached far into the internal affairs of some of his members. This is what he calls his "rescue squad" operation, a brand of management doctoring that has treated the ailing businesses of some 150 members with, he believes, only two casualties.

In one case, where trouble flared up in a business where two brothers were partners, Kolodny traced the trouble to the wives and the appearance of a mink coat on one of them. His prescription boiled down to this: "If you're going to stay in business, don't associate socially. If you hadn't been socializing, one wife wouldn't have known what the other was wearing. You can't

**You can save \$100 here**



**... if you fill it with this**

In fact you can save up to \$100 for *every* unfilled door opening in your new building. You'll save that much on installed cost by filling that opening with a Fenestra\* Hollow Metal Door-Frame-Hardware Unit instead of some other kind of hollow metal door.

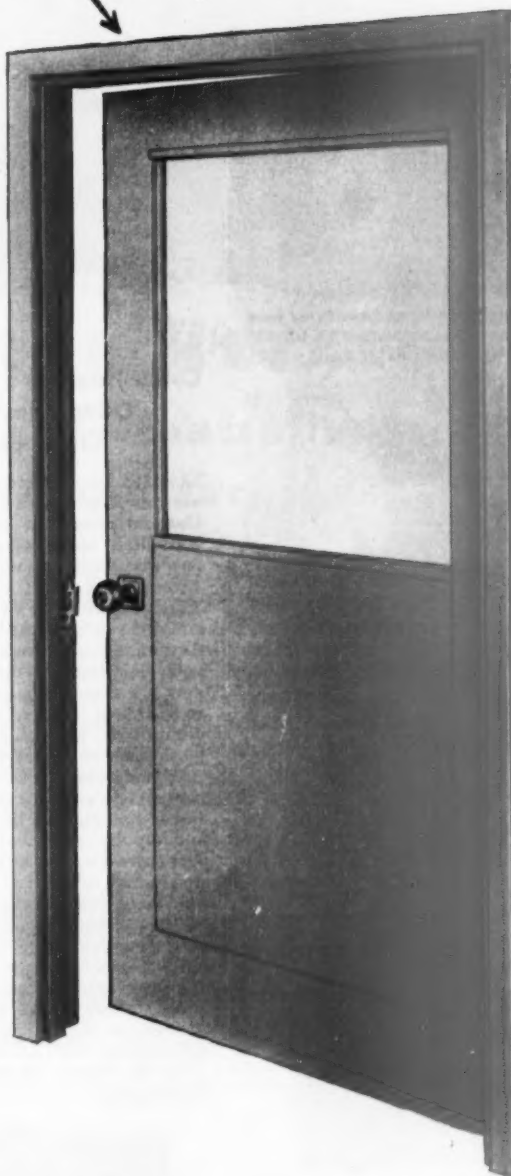
**HERE'S WHY:**

**Fenestra Hollow Metal Flush Doors cost less to buy** because they are mass produced on special jigs that cut out a lot of expensive time and labor. This system was born of Fenestra's years of metal fabricating experience.

**You save on installation cost** because these handsome doors come complete with strong, prefitted, prime-painted steel frames and shining hardware. Again time and labor are saved. There's no cutting or fitting—the door is in and in use a lot more quickly.

**You save maintenance costs** because Fenestra Hollow Metal Doors can't warp, swell, stick or splinter. They always open easily . . . smoothly. And they close quietly, because inside the panels is double insulation.

For strong, solid quality at unusually low cost, check on Fenestra Doors—there's a door for every purpose in the Fenestra line: Entrance Doors, Flush or Regular Interior Doors with glass or metal panels, Doors with the Underwriters' B Label. For pictures and details, write the Detroit Steel Products Company, Dept. BW-12, 3425 Griffin Street, Detroit 11, Michigan. \*\*

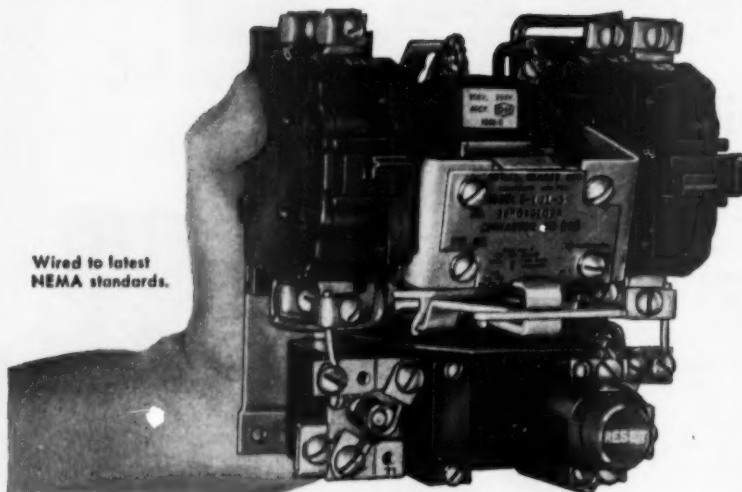


*Fenestra*

**HOLLOW METAL DOOR-FRAME-HARDWARE UNITS**

**. . . save building time, labor, materials and money**

# News for Motor Control Designers



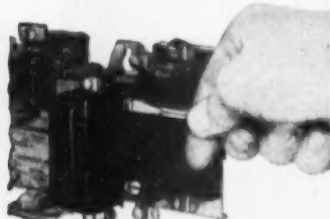
Wired to latest  
NEMA standards.

**Big Control Capacity on Small Panel Area**  
NEMA Size 1 Compact Starter; 7½ HP, 440  
V. Measures only 5.75" x 5.75" x 3.8"

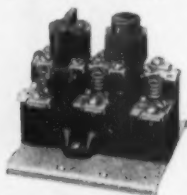
**NEW**

## Cutler-Hammer ☆ ☆ ☆ Components Offer Many Desirable New Features

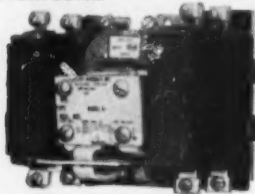
Electrical engineers everywhere today are quick to praise the spectacular new Cutler-Hammer ☆ ☆ ☆ Motor Control. The three stars stand for three entirely new standards in motor control performance and satisfaction . . . an entirely new standard in ease of installation . . . an entirely new standard in trouble-free performance . . . an entirely new standard in both electrical and mechanical life. These new standards are of great importance to machine design and control circuit engineers. Particularly, because they have been achieved with components of extremely small size designed to permit the closest possible grouping on panels. Panel spacing can be determined almost entirely by electrical considerations . . . extra dead space is not needed for the mechanics of wiring, adjusting, or even disassembling installed components. No other components offer such simple and complete flexibility; easy-to-add electrical interlocks, easy-to-change contact arrangements on control relays, three coil overload relays for full three-phase protection, etc. Write today for technical data sheets. CUTLER-HAMMER, Inc., 1275 St. Paul Avenue, Milwaukee 1, Wisconsin.



**Easiest-to-add Extra Interlocks**  
Only a screwdriver is needed; contactor  
or other parts not disturbed.



**Three-Coil Overload Protection**  
Full 3-Phase protection without exaggerated  
space requirements and expense. 3-  
Coil relay shown here with 3-position switch  
and reset button.



**Most Adaptable Control Relays**  
Two to six poles; dust-safe vertical con-  
tacts. Contacts can be changed from N.O.  
to N.C. or vice versa by simply inverting  
position. Circuit arrangement is always  
visible.



have a partnership 24 hours a day."

• **NATD and Manufacturers**—Through the years, Kolodny has both fought with tobacco manufacturers and been charged with fronting for them. As of today, though, he says relations between manufacturers and wholesalers "are on a more ethical basis than at any time in the past."

In 1947, however, Kolodny found reason to take at least a half swing at cigarette manufacturers when he complained to the Federal Trade Commission about the practice of "drop shipments."

This was a system of shipping direct to certain retailers, completely bypassing wholesale channels; favored stores got extra stock free. FTC's intervention resulted in the manufacturers' scuttling the scheme.

Since the famous Lexington anti-trust decision against the cigarette makers in 1941, NATD has often been said to do what the makers themselves can no longer do—speak for the industry with a single voice. Kolodny in no way denies this. In fact, he cites his role in forming the National Tobacco Tax Research Council, a foundation set up to fight cigarette taxes, as an instance where NATD took the lead in presenting a case for the industry as a whole. The council is supported by funds from all segments of the industry.

Some of the cigarette manufacturers—Philip Morris and P. Lorillard among them—are members of NATD. Kolodny considers this quite logical, since, he says, "we do carry the ball for the good of the industry as a whole. Whatever we do to improve relationships with the public helps all of us."

• **When Not to Speak**—With his two jobs a day and heavy speaking schedule, Kolodny hardly has an excess of time for the nontobacco world—which includes his wife (his ex-secretary) and seven-year-old daughter. Yet the man gives the impression that he would sorely resent a cut in his work schedule, even in his platform appearances.

"I am a showman," he concedes. "I don't apologize for liking an audience. The important thing you have to learn, of course, is timing. A good showman knows exactly the right time to say or do something."

As a showman, Kolodny apparently feels this is not the time for him to speak his piece on the No. 1 problem facing cigarettes today—the lung cancer scare (BW—Dec. 5 '53, p. 58). For the record, at least, he is content to let the manufacturers' statements carry the defense.

Kolodny does feel, however, that the sales slip this year is only a "momentary retardation"—the result of a lot of shifts in brand preference. "There is nothing," he says, "to indicate a threat to the industry."



**IN THE WEST...OR LOOKING WEST?**



General Metals foundries produce "quality-controlled" steel, iron and non-ferrous castings in any shape, size or material.

The finest in press, drop and upset forgings from all types of forgeable materials are produced by General Metals.



call on  
**GENERAL METALS**  
for "quality-controlled"  
castings and forgings

For the past quarter century General Metals has served western industry in the production of high-grade "quality-controlled" castings and forgings. Over this period there has been constant expansion and advancement in methods, equipment and facilities. Today, General Metals' nine modern plants are recognized as the largest and best equipped in the west, strategically located for service to manufacturers and branch operations.

If you are looking West, or already manufacturing in the West, investigate how General Metals can simplify your castings and forgings problems. Your inquiry will receive our prompt attention.



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**PACIFIC FITTINGS DIVISION** • Pipe Fittings, Couplings, Nipples . . . Plants at San Francisco & Hollywood, Calif.  
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Hydraulics • Line Supports • Diesel Engines • Process Machinery • Oil Burners • Castings & Forgings • Pipe Fittings



# Merry Christmas

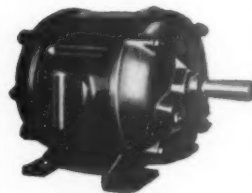
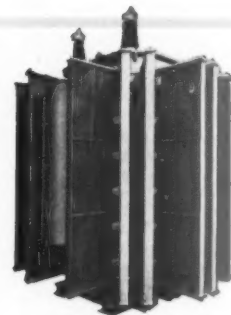
May your holiday be merry and bright . . . yes, bright with the pleasure and peace of yuletide . . . and bright with the merriment and cheer of good fellowship.

In city and country, on farm and in penthouse . . . thousands of electric lamps will help light the season's festivities and lend cheer to gay gatherings.

Christmas would seem incomplete without the help of electricity . . . the same electricity that helps make the products and provisions that are not only important at Christmas but every day of the year. Just as it provides the twinkling gems of light on your Christmas tree, it serves throughout the year to help you to another even brighter Christmas.

\* \* \*

Electricity is more important than you may think. Just about everything good depends at some time on electric power. Wagner Transformers and Wagner Motors serve you, and the industries that serve you, through helping provide the power for every need and pleasure. Wagner products are famous for dependable, trouble-free service at farm, home and industrial applications.



WAGNER ELECTRIC CORPORATION  
4400 PLYMOUTH AVE., ST. LOUIS 14, MO., U.S.A.

BRANCHES AND DISTRIBUTORS IN ALL PRINCIPAL CITIES

ELECTRIC MOTORS  
TRANSFORMERS  
INDUSTRIAL BRAKES  
AUTOMOTIVE  
BRAKE SYSTEMS—  
AIR AND HYDRAULIC

# MANAGEMENT



WORK in a coal mine—it's one of See It Now TV shows with Ed Murrow (right).



DISASTER in flood area in Iowa in 1952 is reported direct from the spot.



TENSIONS in Berlin are discussed with High Commissioner James Conant.



CONTROVERSIES between American Legion and Civil Liberties Union and . . .



. . . over ouster of Air Force Lt. Radulovich are aired. These ingredients are . . .

## Wooing the Eggheads for Alcoa



The pictures above show a man selling a corporation to a televising audience that includes an unusually high percentage of the corporation's natural critics. Specifically, they show Edward R. Murrow winning friends for the Aluminum Co. of America with a program pitched squarely at the sort of person who likes an intellectual approach and a controversial subject.

When Arthur P. Hall, Alcoa's vice-president for public relations and advertising, was asked why his company

picked Ed Murrow for this job, Hall replied: "First, because he's believable; second, because he's a personality."

Hall meant, (1) that the audience Alcoa wants to reach believes Murrow enough to watch him put on See It Now, and (2) Alcoa gets in Murrow something it has been seeking for five years: a way "to humanize itself," as Hall puts it.

• **The Murrow Touch**—See It Now is a half-hour show that goes out over the CBS network every Tuesday night. On



## CLARK UTILITRUCKS handle the toughest jobs at least cost!

...they're engineered to satisfy driver, maintenance man, management

Here are the most advanced 6000-7000 lb. fork trucks on the market today—Clark's gas or electric UTILITRUCKS. Built to handle jobs that break the backs of less rugged trucks, these UTILITRUCKS have proved their superiority in foundries, steel mills, stevedoring\* and heavy warehousing. They represent an ideal balance of essential engineering features. They get more work done at less cost, for these reasons:

### 1. Easier to drive

All controls at the driver's fingertips, like an automobile; compact and more maneuverable; shockless steering; increased braking efficiency; 140 sq. inches additional visibility; 25 inches of free-lift; DYNATORK or HYDRATORK DRIVE available on gas model.

### 2. Easier to service

Complete accessibility for maintenance. On gas model: one-piece "zipper" hood folds back to expose

engine; one-piece floorboard lifts up to expose master cylinder and transmission; swing-out battery. All service points easy to reach.

### 3. Built to take punishment

Welded, integral-unit box frame eliminates distortion; higher inch-pound rating; axle-to-frame mounting absorbs shocks and strains; new design wheel and backing plate seals out dirt and abrasives. Oil bath air cleaner and oil filter standard on gas model. Totally-enclosed drive motor, sealed-for-life bearings on electric model.

We invite you to compare the UTILITRUCKS to any 6000-7000 lb. truck on the market! Without obligation, you can discuss them with your nearby Clark dealer, listed in the Yellow Pages of your phone book. Or write us for free descriptive literature.

\*Special stevedoring model available



**CLARK  
EQUIPMENT**

Industrial Truck Division  
**CLARK EQUIPMENT COMPANY**  
Battle Creek 42, Michigan

the show, Ed Murrow and his co-producer, Fred W. Friendly, try to read the whole face of America, principally by focusing on a variety of individuals. Recent shows have played on such touchy subjects as guilt by association and civil liberties, but over the period of a year the coverage is broad. Past shows have ranged from a documentary of how coal is mined to a stirring Christmas show from Korea.

On Dec. 29, See It Now will again give the U.S. an idea of how G.I.s in Korea spent Christmas. Like last year's show, it won't spoil anybody's holidays, but it will rip the insulation off many a conscience. That's an Ed Murrow trademark.

In the Korea show, Murrow's furrowed brow will appear on the screen to tell what the camera will pick up next: perhaps a mixed Negro and white group decorating their tank company's Christmas tree, or a platoon of British infantry, sporting berets on their heads, drinking their near-frozen beer ration and singing Hark the Herald Angels Sing. As always, Murrow will close in on the individual and let the scenery fend for itself.

At the end, Ed Murrow will come on once more, and possibly, as he has had to do several times in the past, will apologize to Alcoa for leaving out the commercial. But there will be few viewers who won't know that Alcoa sponsored the show.

• **Alcoa Examines Itself**—Alcoa pays CBS about \$2-million a year for See It Now. That's nearly one-third its entire advertising and public relations budget, and a big outlay for a company with only minor lines of consumer products. But Alcoa has its reasons.

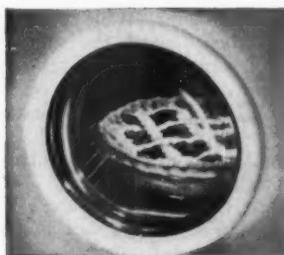
Five years ago, Alcoa had a feeling in its bones that a lot of people—including customers and the government—held grudges against it.

To test its theory, Alcoa's management, in 1949, sponsored a highly confidential and costly survey. When the results were compiled, they found the worst was true all right.

Customers liked the product. Service was O.K. Prices were generally right, too. But the customers didn't like Alcoa's attitude. They didn't really know anybody over at the Aluminum Co. The field men who called on them were, on the one hand, sure of themselves, and, on the other hand, lacked authority. Most of the customers didn't even know who the president of Alcoa was then, despite the fact that Roy A. Hunt had been since 1928.

As for the government—well, Alcoa had been tied up in a federal antitrust case since 1937: not exactly the best climate for friendly relations.

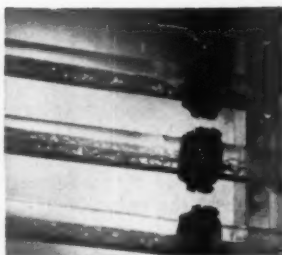
Some of these difficulties had to be licked inside Alcoa. For instance, publicity-shy Irving W. Wilson, who



### 1 Transparency

You can let customers see inside your product through glass. A good example is the PYREX brand oven window that *stays* crystal clear.

It's easy to keep clean.



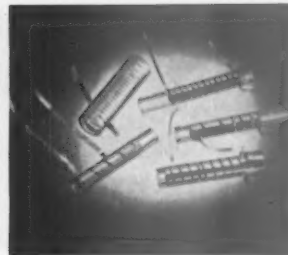
### 2 Corrosion Resistance

If your product must cope with corrosive liquids or atmospheres, glass will improve its operation, lengthen its life. It's the world's most corrosion-resistant material. The severe service PYREX brand pipe stands in chemical plants illustrates the point.



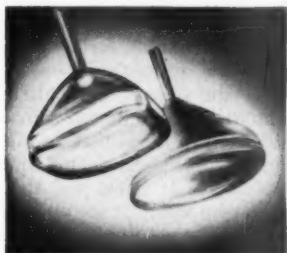
### 3 Heat Resistant

Where your problem is heat or quick changes from hot to cold, PYREX brand glass No. 7740 will stand temperatures below zero to 250°F. Vycor brand glasses go to 1800° F. Picture shows pouring hot metal into Vycor dish on cake of ice.



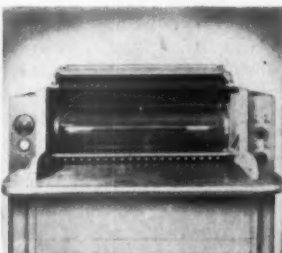
### 4 Electrical Stability

Metal bonded to glass forms which have high dielectric strength and low temperature coefficient makes inductances and capacitors of exceptional stability. Electronics industry uses tens of thousands of the glass inductances shown in the picture.



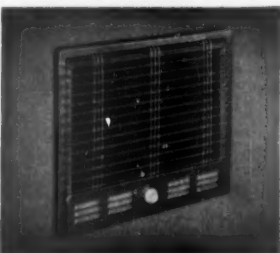
### 5 Hermetic Enclosure

Glass forms perfect glass-to-glass or glass-to-metal seals for vacuum-tight applications. Vacuum bottles are a good example. So are TV tubes and sealed beam headlights.



### 6 Light Transmission

Glass can accurately control and transmit light with permanent reliability. Good examples are all around you but one rather unusual one is the glass cylinder in this printing machine. It transmits the ultraviolet rays produced by a mercury arc lamp.



### 7 Heat Generation

Although you normally think of glass as an electrical insulator, Corning's E-C glass conducts electricity and radiates heat. E-C glass is ideal for space heaters, dryers, and other applications especially where an *even* heat distribution is wanted.



### 8 Photosensitivity

Designs reproduced photographically in Corning's special photosensitive glass cannot fade or wear off. They are ideal for permanently reproducing nameplates, photographs, artwork and offer a variety of design possibilities.

## 8 properties of glass to help you make better products

These eight properties give you only an indication of the versatility of glass by Corning.

This remarkable material can be made extra strong or weak, to conduct electricity or act as an insulator, to pass light or cut it off in virtually any size, shape or color you need.

*It may pay you well, in terms of better operating characteristics, lower production costs, and extra sales points for your product, to consult Corning engineers before you reach the blueprint stage. For further information, just mail the coupon or write for a copy of, "GLASS—its increasing importance in product design."*

**CORNING GLASS WORKS**

**CORNING, NEW YORK**



*Corning means research in Glass*

**CORNING GLASS WORKS, 612 Crystal Street, Corning, N. Y.**

Please send me your 12-page illustrated booklet, "GLASS—its increasing importance in product design."

Name.....Title.....

Company.....

Address.....

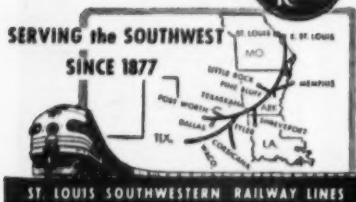
City.....Zone.....State.....



## in car miles per car day

For more than 75 years, the Cotton Belt Route has governed its operations on the philosophy that "Freight Comes First." As a result, this famed Southwestern Railroad today leads all others in car miles per car day.

## FREIGHT comes FIRST on the COTTON BELT ROUTE



## Who says Cry Babies can't sell?

This little lady and her eleven hilarious nursery mates in our laugh-packed "It's a Cruel World" calendar have a way of getting (and staying) in the homes of your customers. Result: a happy reception to your sales message every day of the year.

Surveys prove that nearly 90% of Shaw-Barton's home "wall signs" are hung... and virtually unanimous use is made of recipes, memo space and household hints featured in them.

Our representative will be glad to tell you about effective calendar advertising campaigns — plus the ideas and materials that make them successful. Ask him in today, or write for full information.

## SHAW-BARTON

Calendar and Specialty Advertising  
GENERAL OFFICES AND PLANT, COSHOCTON, OHIO  
SALES OFFICES IN PRINCIPAL CITIES

became Alcoa's president in 1951, was encouraged to speak before a group of security analysts, and to go on See It Now to show Ed Murrow through Alcoa's new aluminum-clad headquarters in Pittsburgh (BW—Mar.29 '52,p.72). Also, the company's attitude toward the press was liberalized. But the major difficulties involved the public and the attitude it had built up toward Alcoa through the years.

• **Giant's Spot**—Alcoa's problem was hardly unique. Unlike the proverbial fat man, whom everybody is supposed to love, the giant has an inherent popularity problem. Alcoa's brother giants, AT&T, General Motors, General Electric, du Pont, know this well.

Half a century ago, before the muck-rakers started baiting the giants, or even 25 years ago, before the government shifted its antitrust offensive into high gear, most of the giants lived a life seemingly untouched by public opinion.

Today, the reverse is true. The giants parade on a runway under the constant scrutiny—or glare—of the government; they are watched carefully by a broadening corps of stockholders, the voting public, the consuming public, and the press. The big fellows know that the opinions of these vast publics make a great deal of difference to them—in court action, in legislation, and in sales.

• **PR Drive**—One result of this reversal has been the rise of the public relations expert. In fact, he has climbed so far that many big corporations now have public relations vice-presidents sitting in their innermost councils.

Arthur Hall became Alcoa's first vice-president for public relations and advertising in 1951, shortly after Roy Hunt moved up to the chairmanship and Wilson took over as president. By this time, Alcoa's management had thoroughly digested the 1949 survey, and the public relations program was tagged for expansion.

Hall decided that a large part of the new program would be a TV show. And he recognized that Alcoa's approach would have to be different from, say, GM's. Hall says: "We don't have an end-use product, so we didn't want to appeal to the masses. We wanted a show to capture the thought leaders." Murrow and See It Now seemed to fill the bill. Alcoa bought the package from CBS and started picking up the tab in December, 1951.

• **Free Hand for Murrow**—Murrow and Friendly decide what goes on See It Now, and very often Alcoa's top management doesn't know what will be on the program until they turn on their own TV sets. This was true a few weeks ago in the Air Force case. Murrow devoted the entire half-hour—skipping the middle commercial—to Lt. Milo Radulovich, the Air Force officer

who was released from the service as a security risk because of the alleged Communist leanings of his sister and father. Plainly, the program made Alcoa's good friend, the United States Air Force, look pretty bad.

Ed Murrow had tried to persuade Secretary of the Air Force Harold Talbott to go on the Radulovich show to present the Air Force's side, but as the case was still in lower channels, Talbott declined.

But when Talbott later reversed the decision of the military and reinstated Lt. Radulovich, he came on See It Now to make the announcement.

The Radulovich case raised See It Now to new heights in the public's esteem. Murrow was deluged with letters—almost all of them standing behind the young lieutenant.

Alcoa was admittedly shaken by the whole thing, but it knows that these are the terms under which you get Murrow. It would frankly prefer fewer controversy shows, although it's aware that they draw the viewers, particularly in the all-important Washington arena. A survey indicated to Alcoa that an impressive number of legislators and bureaucrats watch See It Now, and that 87% of those who watch it are able to identify Alcoa as the sponsor. Of these, 67% recalled the content of the commercials.

• **Commercials**—Right now, Alcoa's commercials are going through a transition. They have concentrated on institutional advertising—how bauxite is mined, how aluminum is rolled. In the future there will be more product advertising. The idea will be to spread the word about the little known uses for aluminum—irrigation pipe, building materials, truck wheels, electrical wiring. With the leveling off in the defense build-up, Alcoa now wants to enlarge other markets for aluminum.

• **Making Them Like It**—Has See It Now paid off for Alcoa? The company thinks it has. Twice a year, Alcoa has a survey run that uses a sample that cuts across the entire socio-economic makeup of the country. The number of people who "like" Alcoa has been slowly increasing, while the number who "don't like it," or "don't know Alcoa" has been slowly decreasing.

Within Alcoa, there's growing enthusiasm for See It Now. Every year, in a day-long session, the company's salesmen are briefed on Alcoa's advertising campaigns for the year to come. According to Hall, at the last two sessions, virtually all the discussion has centered around the show. The salesmen say it's one of the first things their customers mention.

One unexpected byproduct: Alcoa rank-and-file employees like to be identified with a company sponsoring such a high-grade show.



## What killed the knight in armor?

The armored knight was killed by *weight* . . . he could no longer carry the great mass of steel required to protect him from the fast improving weapons of the 17th Century. Thus an early casualty in the age-old battle of *ideas vs. limited materials*.

Today those casualties are rare. For designers and engineers now have at

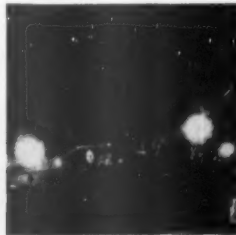
their command special *alloy steels*. Superhard for tools and dies . . . strong and tough for springs and cables . . . heat- and corrosion-resistant for engine parts and chemical equipment . . . these modern materials meet almost any specifications that progress might demand. Made to order with Vancoram ferro alloys, they keep ideas alive in

every phase of science and industry.

Working with America's steel-makers to deliver ever finer, ever more versatile alloy steels, Vanadium Corporation produces ferro alloys of vanadium, titanium, chromium and silicon. VCA is also a major source of master aluminum alloys and uranium for atomic energy.



**Armor today**, made of special alloy steel, gives maximum protection to naval vessels and military equipment with minimum loss of mobility. High strength-to-weight ratios demanded here are produced with Vancoram ferro alloys.



**19 billion pounds** was last year's output for America's booming petrochemicals industry. Scores of petrochemical processing units call for the corrosion-resistant stainless steels made with Vancoram ferro alloys.



**Your daily bread**—like your family car—is cheaper, thanks to alloy steels. For on the farm, as throughout industry, these modern metals have brought new efficiency and productivity to every type of tool and machine.

## VANADIUM CORPORATION OF AMERICA

420 Lexington Avenue, New York 17, N. Y.

Pittsburgh • Chicago • Detroit • Cleveland

PLANTS—Niagara Falls, N.Y.; Graham, W. Va.;

Cambridge, Ohio; Durango and Naturita, Colo.;

White Canyon, Utah

MINES—South America, Southern Rhodesia, Canada, U.S.A.

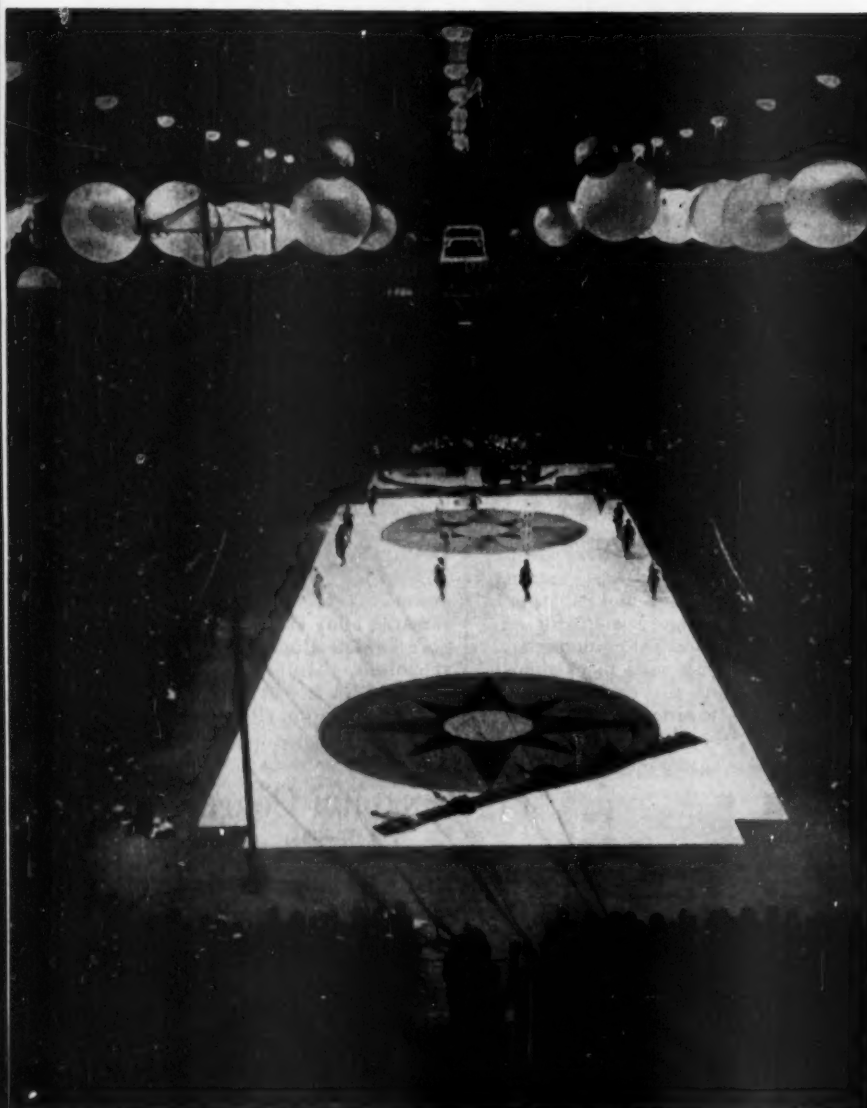


Producers of alloys, metals and chemicals



**HUGE PARTY** that Boeing Airplane Co. threw last week has few equals in size, but it's matched in spirit by other forms of . . .

## Christmas Greetings for Employees



**PROFESSIONAL CIRCUS** was part of Boeing's Yuletide gift to its workers. Some 84,000 employees, relatives, and children showed up during the two-day run.

Last weekend, Boeing Airplane Co., Seattle, tossed what was pretty certainly the biggest industrial Christmas party in the country (pictures). On Saturday a batch of 40,000 employees, relatives, and children showed up. Another 45,000 appeared on Sunday, for a two-day total of about 85,000.

The company pays for the whole show, which is called Boeing-Santa's Circus; it is staged by company supervisors. The idea has been growing ever since it started two years ago. Boeing has to hire the University of Washington's indoor athletic pavilion, which seats 11,000. This time, Boeing has split its professionally staged show into four shows a day to handle the crowds. Stockings—50,000 of them stuffed with candy and toys—were ready; each child got one.

• **Far and Wide**—For sheer size, the Boeing do stands alone among Christmas parties. But in spirit, it is matched



**FILLED STOCKINGS**—50,000 of them—were on hand for employees' children.

# Transportation News

Volume 1

Issue 9

## P.I.E WINS NATIONAL MAINTENANCE AWARD



For Personnel, Equipment and Facilities

### Truck Shop Excellence Contest Won Four Consecutive Times

Transport Topics, the American Trucking Association's weekly publication, awarded Pacific Intermountain Express, cross-country motor freight carrier, its Shop Excellence Award at the 1953 A.T.A. Convention, Los Angeles, California. The firm's maintenance program and shop operation was judged the most outstanding of all trucking firms in the nation with fleets of more than 700 vehicles.

Characterized by the publication as, "one of the most efficient, progressive truck operators in the country," P.I.E people have long recognized the importance of a sound, precise preventive maintenance program. The program includes rigid inspections and regularly scheduled maintenance checks as equipment passes through five District Shops and the General Shops in Denver where major overhauls are made on a predetermined mileage basis.

### Shippers Benefit

Complete preventive maintenance programming has three primary objectives: (1) efficiency, (2) economy and (3) service to shippers. The most important of these three being dependable service to the shipping public.

The shops are open to visitors. Advance notice will be appreciated.



General Shops (Upper Left) and Freight Terminal, Denver, Colorado



Scheduled Engine Overhaul



CHICAGO, ILLINOIS  
DENVER, COLORADO  
ELKO, NEVADA  
ELY, NEVADA

KANSAS CITY, MISSOURI  
LAS VEGAS, NEVADA  
LOS ANGELES, CALIF.  
OAKLAND, CALIF.

# P.I.E

PACIFIC INTERMOUNTAIN EXPRESS



### TERMINAL & SALES OFFICES

OAKLAND, CALIFORNIA (GENERAL OFFICES)

OGDEN, UTAH

PIECHE, NEVADA

POCATELLO, IDAHO

RENO, NEVADA

SACRAMENTO, CALIF.

ST. LOUIS, MISSOURI

SALT LAKE CITY, UTAH

SAN FRANCISCO, CALIF.

SAN JOSE, CALIF.

STOCKTON, CALIF.

TOPEKA, KANSAS

WICHITA, KANSAS

### SALES OFFICES

BOSTON

CINCINNATI

CLEVELAND

DETROIT

INDIANAPOLIS

MILWAUKEE

NEW YORK

PHILADELPHIA

WASHINGTON, D.C.



## Girl with stapler beats girl with tape 4 to 1

### ...and cuts costs in half!

This photo was snapped during a shirt-wrapping race between two girls at Kent Stores, the world's largest laundry and cleaners.

With a Bostitch stapling plier and paper bags, the girl at left was able to wrap 4 times faster, averaging better than 3 packages a minute.

The other girl wrapped with paper and tape, the method Kent discarded. For her to draw the tape, tear it, position it, and press it—while the first girl did the same fastening job with a simple click—click of the Bostitch stapling plier—was hardly a race at all! With a 4 to 1 speed advantage, the new wrapping method cut time-and-material costs in half.

Stapling is more secure, looks neater, is immune to heat and humidity. Usually the delivery slip is attached with one of the same staples that close the end of the bag.

Over 800 kinds of Bostitch staplers trim time and costs on *thousands* of fastening jobs. To help you fit the right stapler to the job, 325 Bostitch Economy Men work out of 123 cities in the U. S. and Canada.

Check over your own fastening methods with your nearest Bostitch Economy Man. There's no obligation. He'll be glad to tell you honestly if and how stapling can save you money.

Look up "Bostitch" in your phone directory or write us.

### Fasten it better and faster with

**FREE** time and money saving bulletins  
tell how stapling can cut your costs.

**BOSTITCH**, 452 Mechanic St., Westerly, R. I.

I want to fasten:

☐ packages ☐ rubber ☐ plastics ☐ light metals ☐ wood ☐ fabric ☐ leather ☐ cartons

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

Zone \_\_\_\_\_

State \_\_\_\_\_

# BOSTITCH

STAPLERS AND STAPLES

by company after company all around the nation. In Chicago, the Employers' Assn. checked 233 companies. More than half said they were throwing parties for employees.

BUSINESS WEEK reporters were able to find only a couple of places in the U. S. where such parties were being cut back this year because of slightly lagging business. The findings were backed up by a National Foremen's Institute survey of bonuses.

NFI surveyed 1,296 companies in this first year since 1950 in which there have been no salary controls. Of the lot, 56% planned to give bonuses, compared with 58% in 1952. Nearly a third of the bonus givers were planning larger gifts in 1953 than in 1952.

Generally speaking, companies aren't lavish with Christmas bonuses. Those that go in for profit sharing, rather than flat-sum gifts, are the most generous. These outfits often wait till the noon before Christmas day to hand out the checks at a meeting of employees and bosses.

• **Big Stuff**—Some companies go in for fabulous Christmas giving. Texas, as usual, is noticeable. There, some independent oilmen and ranchers go way beyond the ordinary cash-in-the-envelope and turkeys for everyone deal. To be sure, some of them have only a handful of employees.

One Texas oilman this year is giving a TV console to every employee. Each employee of a Houston natural gas company gets a tailor-made suit. An oilman in Wichita Falls is giving each of his old hands a new Ford. A Houston oilman is having a complete turkey dinner, precooked, delivered on Christmas noon to the home of each worker.

One nationally known Houston oilman pulls out all the stops, and varies the gifts from year to year. One time it was a wardrobe for each employee, another time it was \$1,000 each. This year: a fine watch. Cash gifts run high, too. A switchboard operator is getting \$1,800; the boss' right-hand man, \$25,000.

• **A Jaunt, Plus**—Few places match this Texas largesse. In Cleveland, though, Scott & Fetzer Co. (vacuum sweepers) called in its 136 salesmen last month, plus wives, and put them up at the Statler. In each room, four pieces of luxury luggage were waiting. Then came a five-day jaunt, no business allowed, topped off with a department store style show. Each wife walked out with a \$150 to \$200 dress.

Kroehler Mfg. Co., Naperville (Ill.) furniture maker, lets its 5,500 employees pick from among \$275,000 worth of assorted gifts.

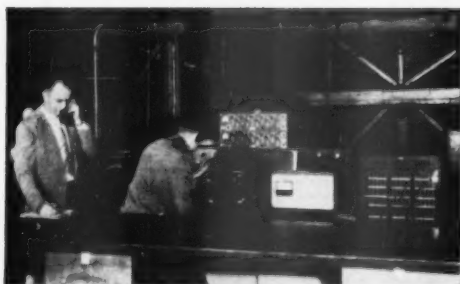
Chicago's Automatic Screw Machine Products Co. hands out bonuses in the stock of well-established companies. If



### ***Pascal did it this way...***

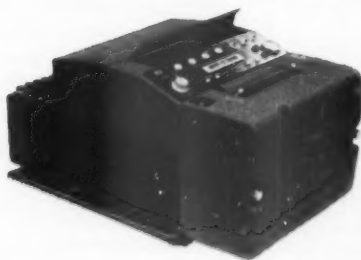
**Hydraulic Pressure**—in 1640—was measured by Blaise Pascal in terms of man power. He discovered that one man, pushing on a small piston in a closed vessel, could move many men holding against a large piston.

### ***Northrop does it this way...***



**Hydraulic Pressure** is measured at Northrop Aircraft by Consolidated dynamic recording instrumentation. While the F-89 "Scorpion" was still in the developmental stage a full-scale mockup containing every electrical, mechanical and hydraulic component was made of the hydraulic system. During a series of tests the system was operated to simulate actual flight. Transducers from as many as 32 strategic points relayed dynamic data back to the Consolidated recording oscillographs, where they were simultaneously recorded to provide the engineers with a complete picture of pressure vs. time vs. actual motion of all control surfaces and actuators. This clear, accurate data eliminated many costly preliminary test flights.

### ***You can profit by their experience this way...***



**Progress and profit** in a competitive market depend on product performance and process efficiency. Thousands of industries, both small and large, now use analytical instrumentation to improve established product lines, develop new products and control industrial processes. Consolidated makes instruments such as the recording oscillograph, left, to measure and record dynamic data—chemical instruments to analyze and control fluids and gases—analogue-to-digital-converters and electronic computers to change test data into readable engineering information. Our experience in this field may be helpful to you.

## **Consolidated Engineering**

CORPORATION

300 North Sierra Madre Villa, Pasadena 15, California

Sales and Service through **CEC INSTRUMENTS, INC.**, a subsidiary with offices in:  
Pasadena, New York, Chicago, Washington, D. C., Philadelphia, Dallas.

**ANALYTICAL  
INSTRUMENTS**

FOR SCIENCE AND INDUSTRY



that's why

*pure white*

# Fort Howard Paper Towels

**offer you greater towel economy!**

The Fort Howard method of treating pulp fibers produces pure-white paper towels that dry faster, feel better, give you greater towel economy!

Take Fort Howard's pure-white Handifold: Controlled Wet Strength keeps Handifold strong and firm when wet, without sacrificing softness or absorbency. Stabilized Absorbency means that Handifold retains its drying ability regardless of towel age. And, like all Fort Howard Paper Towels Handifold has sufficient body for maximum absorbency.

Each of the eighteen grades and folds of Fort Howard Paper Towels has these three requirements of a good paper towel. In addition, all Fort Howard Towels are Acid Free . . . feel good, are easy on your hands. Call your Fort Howard Distributor Salesman today!



**FORT HOWARD PAPER COMPANY**  
GREEN BAY, WISCONSIN



For 34 Years  
Manufacturers of  
Quality Towels,  
Toilet Tissue and  
Paper Napkins



possible, each employee gets stock in the same company year after year. The plan is in its fifth year now, costs the company about \$3,000 annually.

In Portland, Ore., Tektronix, Inc. has a switch all its own. Employees vote on what they want. This year, they picked a half day off with pay.

The survey of the Chicago Employers' Assn. gives a good summary of what companies do for Christmas. Of the 233 checked, 123 throw parties. In 136 cases, cash bonuses go to office workers; in 122 cases nonoffice workers get them. Three give bonds. Some 20 hand out merchandise to office and nonoffice workers.

• **Flat Sums**—On the whole, though, company giving at Christmas runs to the ordinary flat sum of money—not too big. Parties are frequent, often with, but many times without, company sponsorship. More than one company has dropped official parties because spirits got out of hand. The lots-of-drinks party of the New York type is widespread, but some companies take a dim view of it.

The whole idea of Christmas giving found one dissenter in Kansas City. "We give it to them all year," he grumbled.

BUSINESS WEEK's researchers came up with one really useful gift—from the company's point of view. A Philadelphia law firm is giving an electric alarm clock to each of its 69 employees. Said the boss: "We hope this gets some of our people to work on time at least for the next year."

## The Scramble for 1954 Grads Slows Down

The steady rise of industry's demands for both technical and nontechnical college graduates is likely to level off pretty sharply this year. That's the finding of Northwestern University's eighth annual survey of company policies and practices for employment of college men and women.

The drop in demand, however, isn't going to affect the price companies are willing to pay to get graduates. Almost half of 151 companies reporting on their plans for engineering graduates said they would pay more next year for beginners than this year. The average starting pay for engineers: \$345 a month, with the biggest number of companies (119) paying between \$326 and \$400. For nonengineering graduates, the majority of the companies were willing to pay between \$276 and \$325.

• **Fair-Haired Boys**—According to the Northwestern check of 216 companies, industry needs for nontechnical graduates next year will increase only 1% over this year's needs. For engineers,



## You know he's always on the job

Come hell or high water, there are some people who simply won't be denied the privilege of doing their duty. It's just a matter of basic character, disciplined by daily diligence . . . and, as much as anything else, a pride in maintaining a record that has been so painstakingly built.

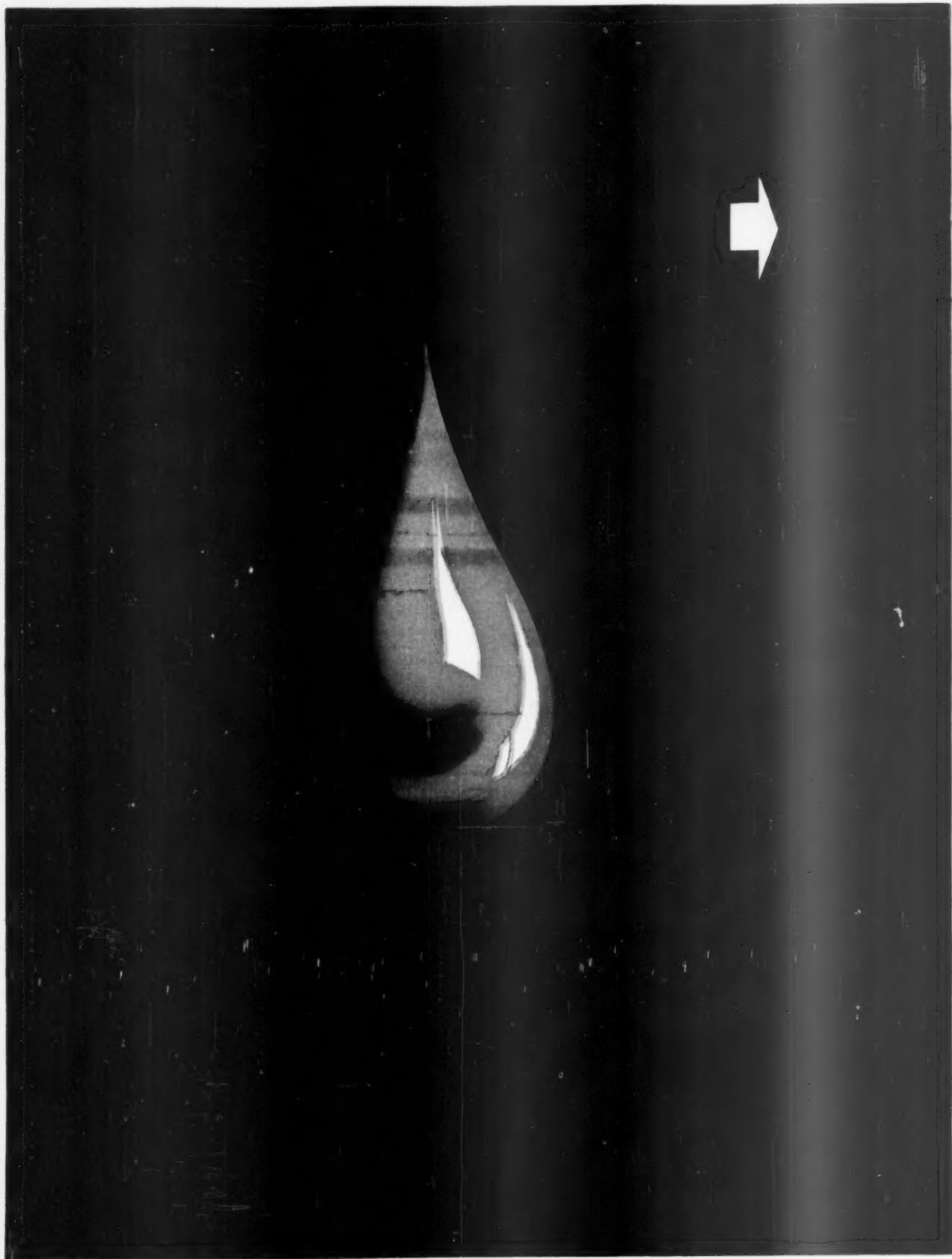
This is the kind of duty that Bristol Brass men understand so well. They, too, have a name for "always being on the job" . . . and they won't stand for the smallest nick in that name . . . if determination, brains and resourcefulness

can help it. *And they have plenty of all three.* Try Bristol Brass service on your own sheet, rod and wire needs. You may encounter *two* new experiences . . . in quality, as well as in service.

. . .

The BRISTOL BRASS CORPORATION, makers of Brass since 1850 in Bristol, Conn. Offices or warehouses in Boston, Chicago, Cleveland, Dayton, Detroit, Los Angeles, Milwaukee, New York, Philadelphia, Pittsburgh, Providence, Rochester.

*"Bristol-Fashion" means* **Brass at its Best**



## **MOLECULE MAGIC...**

This tiny drop of oil, say the chemists, contains hydrocarbons—the raw material for hundreds of thousands of organic chemicals . . . the makings for tires and textiles, for dyes, detergents and deodorants, for paints, plastics and polishes, for agricultural and industrial chemicals.

Oil—the ointment of the ancients and preservative for mummies—is old. It's Nature's billion-year alchemy that changed fish and lizard left-overs into black gold . . . chemical "gold" that is just now being developed.

## **DREAMLAND IN A DROP...**

It wasn't until this century that the chemical and petroleum industries began the molecular magic that transformed a drop of oil into a two-and-a-half billion dollar enterprise.

How did it happen? Principally because of the way we Americans work. Every art, science and branch of engineering has the opportunity and the incentive to add its drop of genius to the pool of progress. Here cooperation and competition bring benefits for all to share.

And lighting the way toward the brighter future is America's all-seeing, all-hearing and reporting Inter-Communications System.

## **THE AMERICAN INTER-COM SYSTEM...**

Complete communication is the function, the unique contribution of the American business press . . . a great group of specially edited magazines devoted to the specialized work areas of men who want to manage better, research better, sell better, buy better.

## **COMMUNICATION IS OUR BUSINESS...**

The McGraw-Hill publications are a part of this American Inter-Communications System.

As publishers, we know the consuming insistence of editors on analyzing, interpreting and reporting worthwhile ideas. We know that businessmen, in order to keep abreast of their jobs, subscribe to—pay for—McGraw-Hill magazines edited for their specific business interests.

And, as publishers, we make the advertising pages of our magazines available to advertisers for featuring the products and services they offer in the interest of increased efficiency and lower production costs . . .

. . . for the editorial pages tell "how" and the advertising pages tell "with what".

## **McGRAW-HILL PUBLISHING COMPANY, INC.**



330 WEST 42nd STREET, NEW YORK 36, N. Y.



HEADQUARTERS FOR BUSINESS INFORMATION



# You Sell It!



# We'll...

## DESIGN IT

Some typical designs assisted to perfection by Taft-Peirce engineers — a silent typewriter, an automobile engine, automatic lens grinders, hat-making machines, watch-part profiling machines, countless machine tools and smaller mechanisms.

## TOOL IT

Several large corporations rely exclusively on the Taft-Peirce Toolroom for tool design and manufacture.

## MAKE IT

1500 Machine tools . . . 450,000 square feet of plant — provide the facilities for anything from a single simple part to thousands of complex mechanisms.

## TEST IT

A separate production line may be set up in sequence operation — from design through assembly, test, and final inspection.

## SHIP IT

Taft-Peirce offers you all or any part of these services. Have the full facts at your fingertips — write for the 92 page illustrated booklet, "Take It To Taft-Peirce."



*For Engineering, Tooling, Contract Manufacturing*

## TAKE IT TO TAFT-PEIRCE

The Taft-Peirce Manufacturing Company, Woonsocket, R. I.

TELEPHONE: WOONSOCKET 1

the increase will be 8.8%—but that is far below the 25% increase the companies reported a year ago.

This supports the fact that technical students are still the fair-haired choices of industry. Northwestern asked companies what difference a man's training had in their promotion policies. Most said that if a man had managerial potential, it wouldn't matter whether he were technically trained or not. But a sizable number—66 out of 206—said those with technical training would get the break over liberal arts graduates.

## MANAGEMENT BRIEFS

Adm. Alan G. Kirk (Ret.), one-time U. S. Ambassador to Russia, has been named chairman of the board and chief executive officer of Mercast, Inc., New York City company that specializes in high-precision metallurgy. The two largest stockholders in Mercast are the Atlas Corp. and Thompson Products.

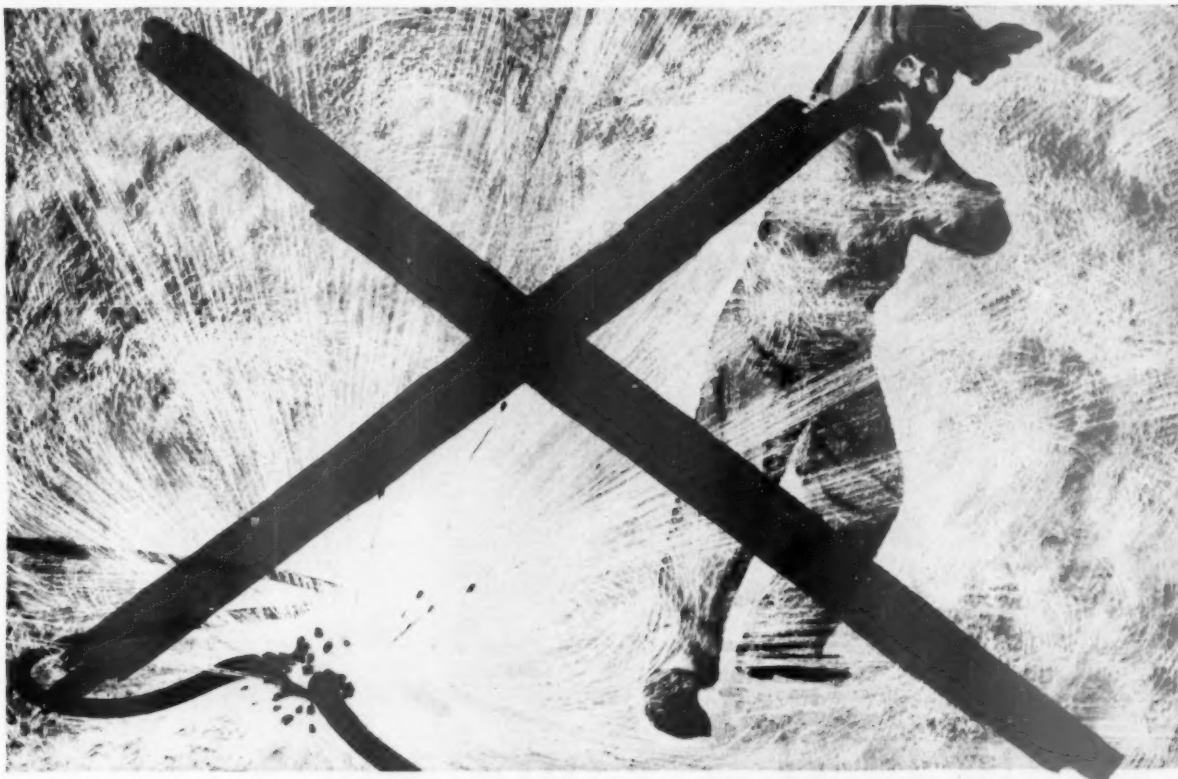
Dismissal of 39 employees by Maxon, Inc., Detroit advertising agency, is another example of a company preparing for the death of the excess-profits tax on Jan. 1 (BW-Dec. 5 '53, p. 27). The agency will bill a record \$35-million this year, but president Lou Maxon says his management, which got burdensome during the years EPT was in force, needs tightening up.

Thomas B. Malarkey, president of M&M Wood Working Co., who lost three vice-presidents by resignation last month (BW-Nov. 28 '53, p. 184), has resigned, too. Probable cause for unrest in the Portland (Ore.) company: M&M's ownership is withdrawing the company from the Douglas Fir Plywood Assn., and Thomas Malarkey believes strongly in trade promotion.

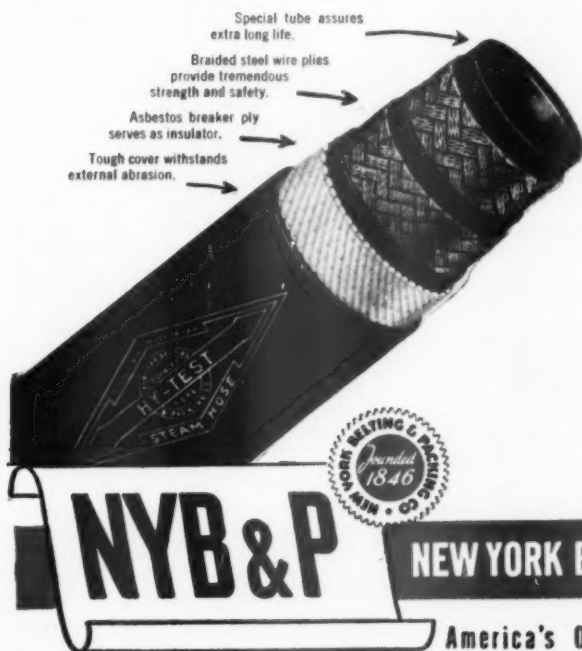
Henry H. Reichhold, chairman of Reichhold Chemicals, Inc. (BW-Jan. 25 '52, p. 118), will take another fling at sponsoring the arts in the 1954-55 season. At a cost of \$50,000, he has chartered two Constellations to bring the Berlin Philharmonic Orchestra to the U. S. for a 24-city tour. Reichhold was formerly chief backer of the Detroit Symphony.

A new safety record for the aircraft industry has been set by the Hughes Aircraft Co. plant at Culver City, Calif., according to the National Safety Council. The plant turned in 6,472,798 man-hours without any lost time due to accidents. This broke the record of 6,115,200 man-hours set in 1942 by the Fisher Body Co.'s Detroit aircraft division.

# ELIMINATE This Hazard!



Here's why **HY-TEST®** steam hose spells **SAFETY...**



NYB&P's **HY-TEST** hose is built so that it just can't burst and spray out superheated steam—steam that can badly scald and *even kill!*

This unique steam hose is reinforced with several rubber-encased plies of closely-woven braided *steel wire* that positively prevent sudden failure—at working pressures up to 200 pounds! After long and severe service, harmless seepage through these blowout-proof plies provides ample warning of the need for replacement.

Add to this safety feature a specially-compounded steam-resistant inner tube, a breaker ply of spiraled asbestos cord that keeps the outer surface cool, and an extra tough, abrasion-resistant cover and you have a super-service, super-safe hose for superheated steam: **HY-TEST** steam hose!

Such advanced industrial rubber products as Gilmer "Timing"® Belts, Resistorip Conveyor Belting and **HY-TEST** Hose are available only from NYB&P Distributors. For name of your nearest distributor, write us . . . or phone PRescott 7-6940, Passaic, N. J.

**NYB&P**

**NEW YORK BELTING & PACKING CO.** 1 Market St., Passaic, N. J.

America's Oldest Manufacturer of Industrial Rubber Products

## Some U. S. Recruits for Holland



## Pulling in U.S. Companies



**RECRUITER:** Joseph Bourdreux spearheads Dutch drive for new foreign investment from headquarters in New York. He finds American businessmen more and more interested in selling to world markets.

One day last year, the president of a midwestern machine tool company, concerned about growing European competition in foreign markets, was toying with the idea of manufacturing abroad—on the theory that if you can't lick 'em, join 'em. That afternoon he received a brochure from the Netherlands Industrial Institute in New York, which proclaimed, in effect, that Holland was the place to manufacture his machine tools. The machine tool builder thought the brochure sensible—the sort that invites questions—and he wrote to New York. "It seems within hours," he recalls today, "Bourdrez was sitting across my desk."

The upshot is that the machine tool company has set up a manufacturing agreement with a Dutch firm, and is delivering to customers abroad at half the U. S. price. And Joseph P. Bourdreux (picture), the big, forceful Netherlander who acts as U. S. scout, missionary, and recruiter in the Dutch drive for foreign investment, has successfully delivered another recruit.

• **Impressive**—The results of the campaign have been, even to some of the most optimistic Dutch, mildly astonishing (map, above). Since the war, some

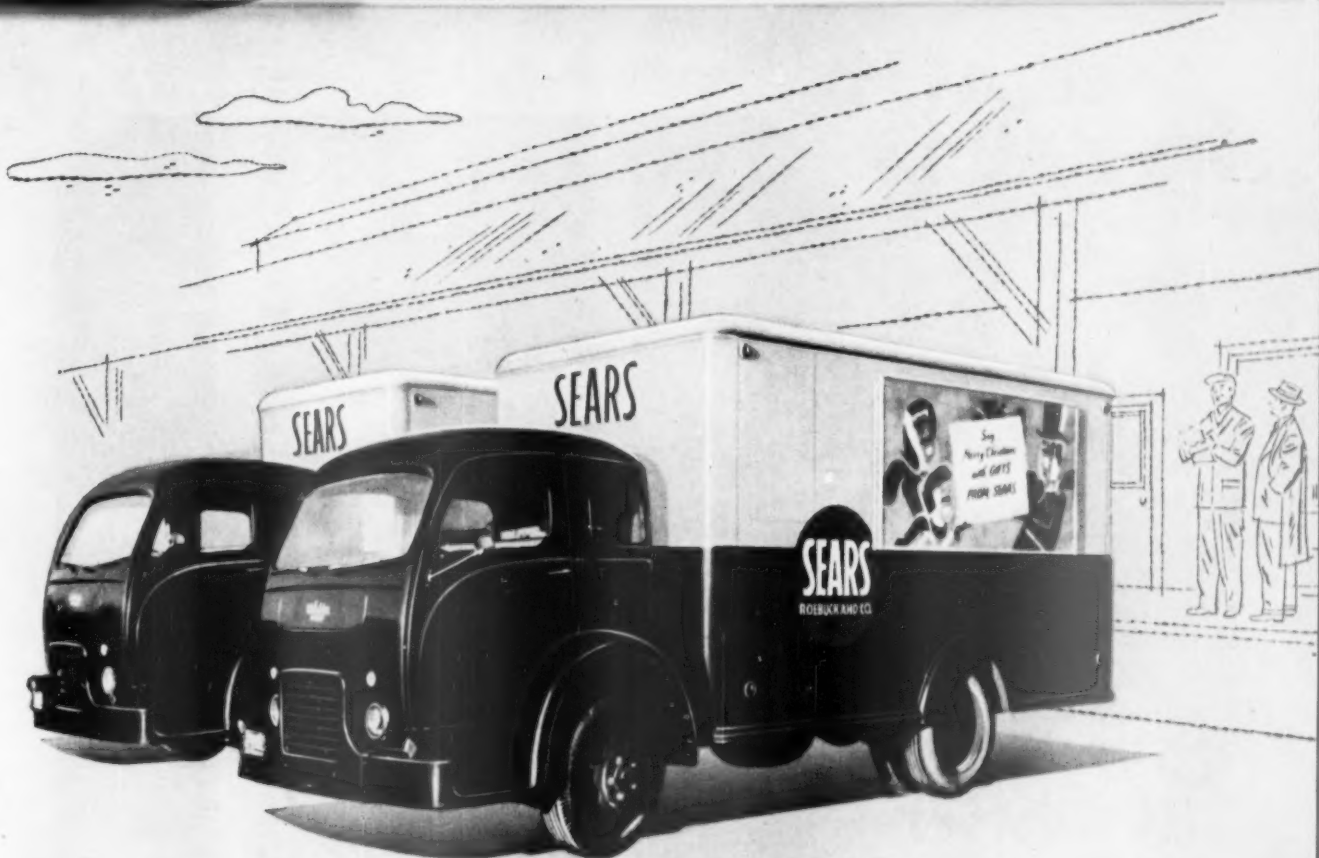
500 license deals have been concluded between Dutch and foreign firms; so have 87 cooperative ventures (17 involving Americans) in which outsiders have participated with Dutch partners in new or existing enterprises. There are 49 cases where foreign companies have set up wholly owned subsidiaries in Holland, 24 of them American.

This year has seen the start of U. S.-owned Dutch affiliates of Fairchild Engine & Airplane Corp., Royal Typewriter Co., and Curtiss-Wright Corp. Just two weeks ago Borden Co. announced it was taking the step. And Joseph Bourdreux says he has a score of more "hot prospects"—from machine tool builders to glassmakers and a baby food manufacturer.

The campaign for new U. S. investment in Holland is a low-key, low-pressure affair. But the Dutch are deadly serious about the need for new skills, new investment, new products for their small country. Without them, they think the Netherlands can't survive.

### I. Roadwork

An Ohio executive, whose company recently entered a partnership in



SAME STORY...

From hat boxes to home freezers, Sears' one-stop shopping center deliveries from Bakersfield, Calif., Dallas, Tex., Chicago, Ill., and many other points, go by White 3000... the modern way to deliver.

## LOOK AHEAD

To More Deliveries...

**Faster and Cheaper!**

**CAN YOU** see more efficient transportation service in *your* business with your *present* trucks?

There is one sure way to achieve modern efficiency in your deliveries — the White 3000.

From loading platform to customer's door and return, the White 3000 performs like the most precision tool . . . the most advance technique . . . that modern engineering has achieved.

Its maneuverability and shorter over-all length save driving and parking time. Its low-level cab saves steps... low-bed frame minimizes lifting and reaching. Safety and visibility advantages are ideal for heavy traffic service. And the power-lift cab saves time and cuts maintenance costs substantially.

See your White Representative for facts in terms of *your* business.

**THE WHITE MOTOR COMPANY**

Cleveland 1, Ohio



FOR MORE THAN 50 YEARS THE GREATEST NAME IN TRUCKS

STAINLESS STEEL FOR BUILDINGS

# McLouth STAINLESS Steel

For the product you make  
today and the product you  
plan for tomorrow.

**McLOUTH STEEL CORPORATION**  
DETROIT, MICHIGAN

*Manufacturers of Stainless and Carbon Steels*



Holland and whose enthusiasm for the country is virtually unbounded, described the Dutch last week as "clear-eyed and ruddy-checked—on Sunday you see them out in track suits doing road-work, not spending the day in some joint." He had discovered that hard work is a hallmark of Holland, bred by centuries of grappling with natural and man-made catastrophes.

In 1945, nearly half of Dutch machinery had been lost, huge acreages of reclaimed land were flooded, transport was paralyzed, production was languishing at 27% of prewar. By 1949—with only the vanguard of Marshall aid to help—the Dutch had restored prewar production.

Then trade troubles, accentuated by the Korean War, began to weigh down the economy. In 1951, the government introduced a drastic deflationary program to correct its heavy balance-of-payments deficit. Labor, which plays a key role in the Dutch government, accepted a 5% cut in real wages; management buckled down to produce even more. Everything was decontrolled but wages and rents; a strict monetary policy was relied upon to keep everything else down.

The policy paid off spectacularly. Deflation didn't harm output or employment: Industrial production is now at an all-time high and unemployment is low. There's a moderate dollar surplus, a large balance of payments surplus, exports are at record peaks. Gold and foreign exchange reserves have doubled in two years—now up to over \$1-billion, with the guilder almost a hard currency. Controls are being dropped, and taxes are to be cut. The verdict, from economists here and abroad, is that the Netherlands is in sound shape.

## II. Sales Campaign

Early in the postwar period, however, Dutch leaders realized that mere reconstruction—getting back to "sound shape"—wasn't enough. The war and its aftermath had cost Holland a lot of income in the form of liquidated foreign investments. Every arable acre in Holland was under cultivation. Dutch cradles were filling with a bumper crop of babies. Economists wondered how such a rapidly expanding population could be put to work in a country not so large as Massachusetts and Connecticut combined. The answer seemed to be a policy of rapid, intense industrialization. Fortunately Holland had a small, solid base of industry to build on. But there was no question that it needed outside help.

• **Inducements**—Dutch officials set about drafting a foreign investment program that, according to one U.S. investor, "gives us a better deal than



## Unloads 21,494,000 pounds in 4 days

Tinker-to-Evers-to Chance, the famed triple threat big leaguers, never operated with greater teamwork in a put-out than the three floating cranes shown above.

Just four days after the *Peterstar* docked in Portland harbor with a load of 9,770 long tons of manganese ore from India, she was empty and back underway.

Stars in the record-making unloading were barge-mounted American Revolver Cranes. Operating under a tight schedule, these big-capacity big-leaguers worked with precision teamwork, delivering capacity-plus loads every pitch.

On jobs of every kind, wherever fast, dependable materials handling equipment is needed, American Hoist equipment does an efficient, cost-cutting job. If you'd like to learn more about how American Hoist equipment can help you cut materials handling costs, mail the coupon below. We'll send you the "Crosby Clipper", a factual, interesting magazine full of illustrated on-the-job stories.



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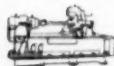
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the Dutch themselves." There's no limit on dividend payments—or transferring the profits home in dollars. You can bring your capital home, too—in dollars. The Dutch will allow you dollars to import needed plant equipment. Local communities will build a plant and lease it to an investor. Red tape is minimized by the fact that the investor deals with one office on all matters—the Directorate General of Industrialization.

Dutch officials are leaning over backward to be flexible—they say, proudly, that every deal is "tailor-made," be it a simple licensing arrangement, a partnership, or a wholly owned U.S. subsidiary (actually, the Dutch tend to encourage the latter form of investment). If a prospect represents an industry that the Dutch particularly want—machine tools, certain chemical and steel processing, printing, textile and dairy machinery are examples—they'll stretch the rules to make a worth-while offer.

• **Sales Talk**—Armed with these inducements, Netherlands officials went out to sell Holland to investors, European as well as North American. Their pitch can be summarized about as follows:

• The Netherlands has a pool of skilled, dependable workers—with almost no labor strife. Wage rates are among the lowest in Europe.

• There's an astonishingly stable government. Right now, it plans to free still further what one observer calls a "moderately managed economy."

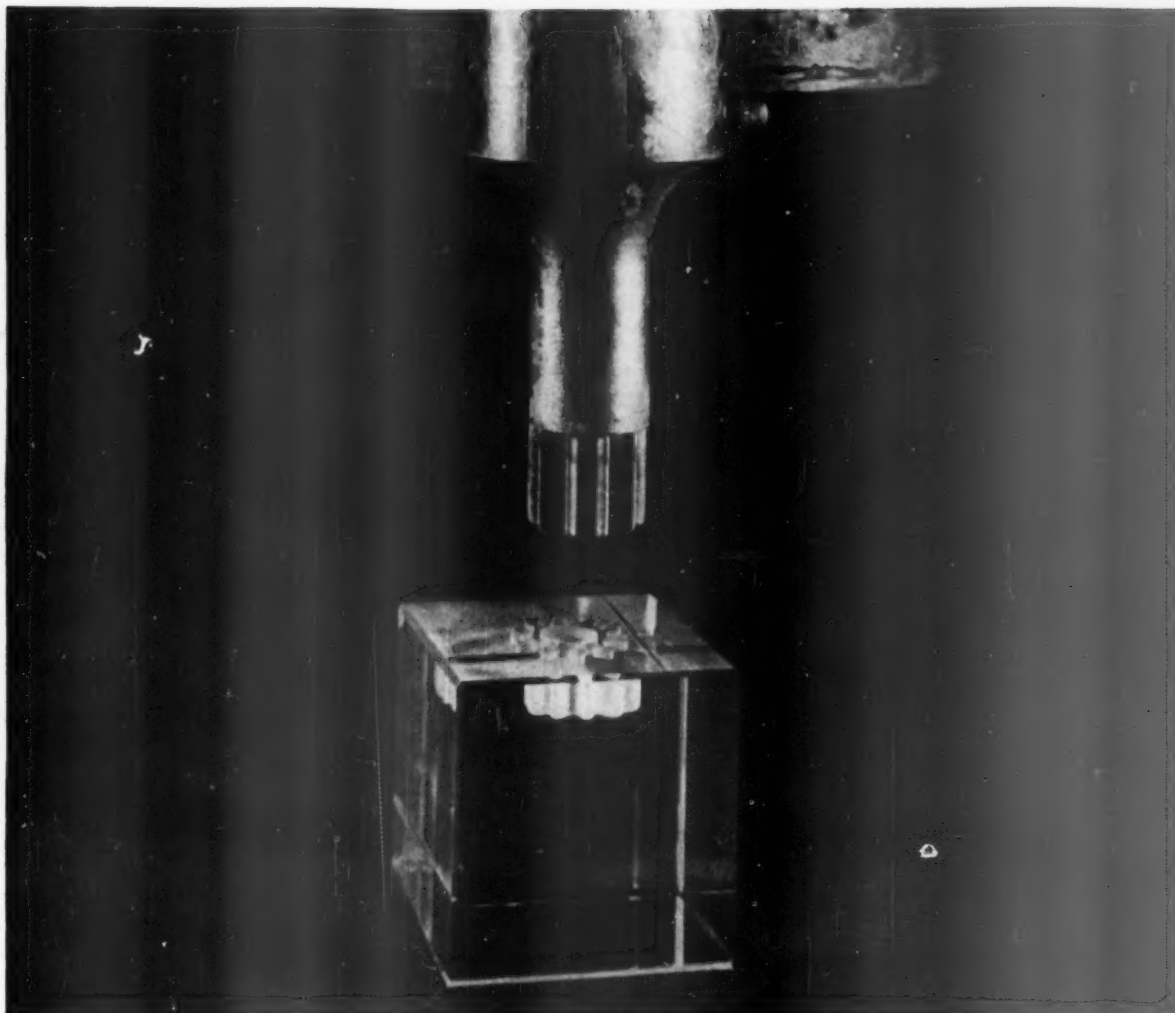
• The Dutch are shrewd and resourceful world traders. There are first-rate banking and credit facilities, especially for foreign trade.

It's the latter point—Holland as a base for world trade—that Joseph Bourdrez is emphasizing in the U.S. The Dutch home market (some 10.5-million) or even the total Benelux market (26-million) is hardly enough to support a major U.S. manufacturing operation. Rather, Holland is presented as an ideal spot to manufacture for world markets, be they in Europe, Africa, Asia, or even Latin America.

By and large, the U.S. branch plants in Holland are exporting an average of 80% to 90% of their production.

• **On the Road**—It's a company with this kind of export problem that Bourdrez looks for on his rounds of U.S. industry (he and his assistant each average four months a year on the road). They've built a mailing list from scratch, maintain contact with organizations like the National Assn. of Manufacturers and the National Foreign Trade Council, have a small but expanding advertising campaign.

Bourdrez finds that the field is more "fertile" than he ever dreamed: More and more U.S. businesses, small ones especially, are considering pushing overseas sales. He claims to have found



Using high-frequency vibrations and low-cost abrasives, the Cavitron Ultrasonic Machine Tool carves holes and patterns of all shapes in hard-to-work materials. Development of the tool climaxed more than 10 years of research and experimental work by the Cavitron Equipment Corporation, of Long Island City, N. Y.

## How SILENT SOUNDS CUT HOLES you can't drill

This common steel gear bites its way into a glass cube as smoothly as it would mesh with its mate.

And that's *something*, for chiseling through glass is quite a trick, even with a tool designed for the job.

Yet, as you can see, it's being done right here. And the machine that does it can also sharpen the hard metal tools used to cut other metals. It can cut diamonds without the use of diamond powder. Some day, it may even eliminate the heat-generated pain caused by your dentist's whirling drill, or provide a vastly improved method for breaking up kidney- and gallstones.

Now how does this revolutionary tool work? *By ultrasonic vibration.*

It vibrates 27,000 times a second! Every vibration pounds water-borne abrasive against the surface you're cutting, and steadily chisels away tiny particles.

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the tool its bite.

There are many similar useful qualities found in Inco Nickel Alloys. Between them, pure nickel and Monel provided the key to the problems of the ultrasonic machine tool. Another of our metals may help to open a door now locked to you. Let's get together and work out that problem of *yours* — soon.

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*bus operators and trucking systems.*

The big picture of Bendix shows twenty-five manufacturing divisions manned by over six thousand engineers and researchers working with and producing hundreds of different products for nearly every basic industry. Bendix business philosophy is planned diversity backed by talent experienced in every branch of industrial science. Bendix makes, for example, a very fine coaster brake for bicycles; it also works with guided missiles and in nuclear physics. A look at the partial list of divisions and products at the right will give you a more comprehensive idea of Bendix diversity.



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##### BENDIX PRODUCTS, SOUTH BEND, IND.

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##### ECLIPSE MACHINE, ELMIRA, N. Y.

Stromberg\* carburetors, electric fuel pumps,  
starter drives, coaster brakes.

##### MARSHALL-ECLIPSE, TROY, N. Y.

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##### ECLIPSE-PIONEER, TETERBORO, N. J.

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##### BENDIX FRIEZ, TOWSON, MD.

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##### SCINTILLA, SIDNEY, N. Y.

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electronic tubes; dynamotors, inverters.

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automatic viscosity regulators, nuclear products.

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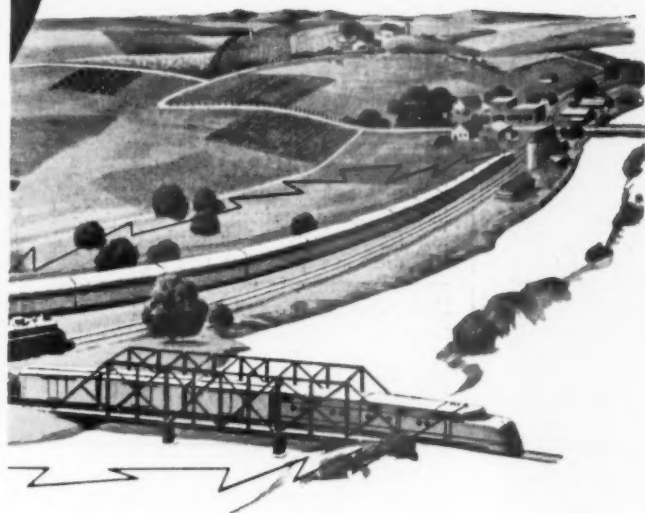
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some that think expansion abroad right now might be more sensible—and cheaper—than expansion at home.

• **No High Pressure**—When a prospect is sighted, Bourdrez's philosophy is to let him make up his own mind—there's no high-pressure sales or tub thumping. The Dutch government, for example, won't take responsibility for making market surveys for a particular product. Bourdrez's job is one of laying all the facts about Holland before a manufacturer, acting as go-between urging a prospect to visit the country and talk to businessmen there.

• **Taking Root**—Above all, Dutch officials say they're looking for companies that will sink roots in the Netherlands for the long haul. They assume that the small beginnings of a certain branch of industry (dollarwise, U.S. investment in the Netherlands postwar is small) may, in a generation, grow into a complete industry. They're confirmed European integrationists, looking for the day when trade barriers will drop away, Europe will be united and competitive in world markets, and Holland will be a small, profitable workshop for industrial goods.

### III. Interim Report

It's too early to assess the results of Holland's drive for foreign investment, or how U.S. investors are making out. Many of the newcomers are just getting started. Most of them are enthusiastic, some are making big money, all but a very few are doing well. So far, U.S. recruits to Holland have added the equivalent of \$160-million, most of it in exports, to Holland's postwar production.

Most problems and complaints you hear reflect the inevitable adjustments to doing business abroad. One company built a high-cost plant and underestimated the strength of the European cartel dealing in its product. Another, according to some observers in Holland, may be making the wrong product for the European market. One executive, doing O.K. in the Netherlands, isn't sure he'd recommend the country as the site for a firm's first overseas plant—its very small home market affords little cushion if exports were to fall. Many investors find trade restrictions in nearby countries difficult, but they remark that the Dutch government is doing a heroic job of helping them clear away barriers to trade.

Beyond that, there's always the problem of getting used to foreign life: You hear comments like "Dutch suppliers behave differently than ours do," or "It takes time to teach even the most highly skilled Dutch craftsmen our way of doing things." But even the complainers reckon that they're in the Netherlands to stay.



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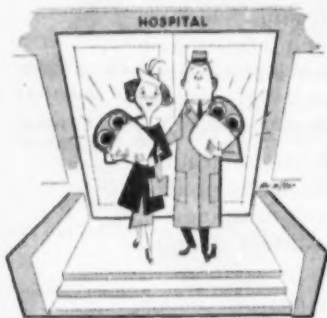
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## Protection or Free Trade

Electrical manufacturers find foreign competition growing . . . Antiprotectionist group sees no reason to side-step that competition.

Last week, the National Electrical Manufacturers Assn., which numbers among its members industry giants like General Electric Co. and Westinghouse Electric Corp., entered the fight over the U.S. foreign trade policy. It plunged into the fray by disclosing the results of a trade study made for it by the National Industrial Conference Board.

The NICB study, tabbed as an objective and factual report by NEMA spokesmen, compared the postwar position of the electrical equipment industry with its prewar position in terms of both imports and exports. NICB says that in setting forth its findings it is not taking a stand on the tariff issue. But its conclusions may well be used to support arguments for protective tariffs, and may bump head-on into the views of the Committee for a National Trade Policy (below).

• **Imports**—NEMA has submitted the study—without recommendations, it says—to the Randall Commission (the group set up by President Eisenhower to study U.S. foreign economic policy, headed by Inland Steel Co. president, Clarence B. Randall).

One of the key points made by the NICB study is that U.S. imports of electrical equipment and machinery in 1952 were 11 times higher than the average in the years 1935 to 1939, compared with only a fivefold increase in electrical exports over the same period of time.

In dollars, electrical imports last year still made up only a small fraction of electrical exports: \$27.4-million as against \$616.4-million, or 4.4%. NICB stresses, however, that the year-to-year trend is more important than the dollar figure in any one year. Electrical imports in the prewar period were only 2.3% of exports.

• **Causes**—Behind this increasing competition for the U.S. electrical manufacturing industry, NICB suggests, are these factors:

• **Low labor costs** in the nine countries studied (Japan and eight West European nations) have more than offset U.S. advantages in productivity. At the most, wages in these countries amount to only one-third of those in the U.S.

• **Foreign competitors** receive greater domestic and export subsidies than U.S. companies. The difference has been increasing in the postwar years, says NICB.

• **U.S. companies** are facing stiffer tax costs than their overseas competitors.

• **West European production** has jumped one-third above its 1938 level.

A factor that has hurt American exports, according to NICB, is increasing discrimination abroad through exchange controls and import quotas.

• **Big Gun**—The study singles out Germany as the greatest potential competitor of the U.S. in the electric equipment field.

And it warns that liberalized trade would aid Germany more than other nations. Germany has moved ahead because of comparatively low costs and new efficient plants built to replace equipment that was bombed out during the war.

A separate study made for NEMA by Stone & Webster Engineering Corp. warns against U.S. reliance on foreign electrical utility manufacturers because "in time of stress such as war . . . they cannot be depended on to deliver essential equipment as needed or to service that equipment after it is installed." NEMA has submitted this report, too, to the Randall Commission.

No decision as yet has been made on whether NEMA will take a position on tariffs as an organization. There is evidence, though, that individual members plan to do so. Westinghouse, for instance, will soon release an interpretation of the NICB findings by Prof. O. Glenn Saxon of Yale University.

## For New Policy

The Committee for a National Trade Policy, a U.S. antiprotectionist group, is starting to throw its weight around in the tariff fight. This week it is launching a new phase in its campaign for a liberal trade policy (BW-Oct.24'53, p150), with a big ballyhoo about the recommendations it made recently to the Randall Commission.

The committee, which is headed by Burroughs Corp. president, John S. Coleman, is not out for free trade or a sudden drastic cut in U.S. tariffs. But it does take a firm stand for a new U.S. tariff policy that would be based on "an assessment of the total national interest."

As the committee sees it, such a policy requires substantial changes in present legislation:

• **Removal** of the "escape clause" and the "peril point" provisions from

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Electronic tachometers, counters, light cells—these are three of many new electronic test instruments industry now uses to speed engineering and improve manufacturing.

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\*Mechanically, this speed has yet to be achieved. But when it is, present-day -hp- instruments will measure it readily.



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the Reciprocal Trade Agreements Act—to give American tariff policy some “predictability” for both foreign and domestic producers.

- Further simplification of customs procedures, and progressive removal of discriminatory provisions from “Buy American” legislation.

- Authority for the President to use trade agreements as a broad instrument of U. S. foreign economic policy. He might then swap concessions on U. S. tariffs for foreign concessions that would benefit U. S. economic interests, though these might not be specifically related to trade restrictions.

- Provision for federal assistance to American enterprises, employees, and communities that might be hurt by tariff cuts.

- **New Approach**—In effect, the committee is trying to change the traditional American approach to tariffs. It is trying to sell the philosophy that U. S. business should be prepared—after a period of adjustment—to face competition from foreign producers in the same way it now meets competition from domestic producers.

The committee plans to push this gospel publicly in the months ahead. Up to now it has tried to line up business support—though its membership lacks representatives from three big industries: chemicals, electrical equipment, and textiles. In this way it has been trying to steer both the Randall Commission and the Eisenhower Administration toward a liberal trade policy.

But when the going gets really rough in Congress next year it will concentrate its fire on public opinion.

On its advisory board are the representatives of several powerful national organizations—George Meany, AFL president; Walter Reuther, CIO president; Herschel Newsom, Master of the National Grange; and Richard L. Bowditch, president of the U. S. Chamber of Commerce. With the help of these organizations, and other groups like the League of Women Voters, the committee hopes to whip up a real national campaign behind any trade liberalization program that Eisenhower presents to Congress.

Political observers figure that if the committee has any real national weight, it's in the political arena that it will really be felt. The same goes for the protectionist groups. For there's no evidence that the tariff arguments, pro or con, are having much more than a marginal influence today on the thinking of the Randall Commission.

The commission is so busy rushing through its own analysis of the whole problem of U. S. foreign economic policy that it hasn't much time to look at the reports submitted to it from outside.



**SULFUR PIPELINES** pushed through southern Mexico's jungles to tap big new reserves are now carrying molten sulfur for world markets. It's first payoff for . . .

## Mexico's Great Sulfur Hunt

U. S. businessmen are getting in on the development as world's newest sulfur deposit starts producing; Ex-Im Bank puts in funds to assure U. S. supply.

The newest, and possibly one of the richest, sulfur deposits in the world has begun producing in Mexico. And U. S. businessmen are scrambling to get in on the development.

Last week, Mexican Gulf Sulphur Co., a Mexican firm backed by U. S. interests, announced that it had begun to produce sulfur from the newly discovered San Cristobal dome in the jungles of southern Mexico, on the Tehuantepec Isthmus near the Gulf coast. It's the first Frasch-process sulfur ever to be produced outside the U. S.—and Mexican Gulf says it will ship 200,000 tons to world markets over the next 12 months. The Frasch process pumps hot water and steam into the dome, recovers molten sulfur.

This week, Texas International Sulphur Co., a Houston outfit set up earlier this year to hunt for Mexican sulfur, signed an agreement with Central Minera, Mexico City, for exploration of Central Minera's Tehuantepec concessions.

- **Also in the Race**—Meanwhile, Pan-American Sulphur Co., another U. S.-financed outfit (some of the same people backing Mexican Gulf are involved), is building a \$7-million plant in the Tehuantepec area; Gulf Sulphur Co. (related to Pan American) says it has found sufficient reserves to warrant a plant; and Texas Gulf Sulphur Co. (a big U. S. producer, and no relation to

the others) is exploring the area. According to Mexican observers, other U. S. sulfur companies, as well as foreign businessmen, are trying to get a look-in to the 2.4-million-acre concession area controlled by the Mexican government.

Another party to the sulfur hunt is the U. S. government: The Export-Import Bank is putting \$8-million into the Mexican Gulf and Pan-American projects. Washington's angle is to assure the U. S., which produces and consumes 80% of the world's sulfur, a growing supply. It's estimated that by 1965 demand will have risen by 110%.

- **Markets, Costs**—The Mexican developers are counting on world markets, too, as well as the embryonic Mexican market. While the sulfur shortage that plagued the free world two years ago has abated, demand for high-quality Frasch-type sulfur is still a few steps ahead of supply.

There have been fantastic claims about the amount of sulfur in the southern Mexican domes—but no one is sure of the extent of the deposits. Sulfur drilling is somewhat akin to oil wildcatting—even some of the best sulfur hunters come up with dry holes. And after a large dome is found, building roads and bringing heavy boilers and pumps for the Frasch process into the isolated Tehuantepec area is an expensive proposition.

## BUSINESS ABROAD BRIEFS

A new British trade center, the second in the U.S., will open in San Francisco Jan. 1. One center is already operating in New York. The offices are set up by London's Dollar Exports Council to help promote British sales in the U.S.

First shipment of F-86-K Sabre jet parts for assembly in Italy under the NATO offshore procurement program has left the U.S. Fifty of the jet interceptors will be put together by Fiat under license from North American Aviation, Inc.

Texas Gulf Sulphur Co. is slated to sign an agreement soon with Iraq to explore the country for sulfur deposits. Finds will be developed on a 50-50 basis under a proposed 50-year agreement.

Mexican memo: A new \$1-million aluminum parts plant on the outskirts of Mexico City was put into operation last week by Alcomex, S. A., an affiliate of Aluminum Co. of America. . . . Petroleos Mexicanos, government oil monopoly, will invest \$6-million in a new refinery to be built in Minatitlan, on Mexico's lower Gulf coast. The refinery is scheduled to go into production in December, 1954; it will turn out 12,000 bbl. of gasoline and 25,000 bbl. of fuel and diesel oil daily.

American Independent Oil Co. will start shipping crude oil in January from the new finds in the neutral zone between Kuwait and Saudi Arabia (BW—Apr. 4'53, p136). Production currently is pegged at 20,000 bbl. daily. First shipment is scheduled to go to Japanese refineries. Other shipments may reach the U.S.

A ban on synthetic gem imports has been requested by Union Carbide & Carbon Corp. because of unfair competition. In a suit before the federal Tariff Commission it charges a German producer with using its patented formula to make gems that are underselling American-produced stones by \$2 a carat.

A new drive-in theater—first in South America—with an 850-car capacity is opening in Lima, Peru. It was built by a local company formed by Peruvians and Americans with a \$180,000 capital.

Colombians are buying locally made Arrow shirts for the first time. Last week the new Cali plant of Industria Colombiana de Camisas, S. A., started turning out shirts under the first license granted a Latin American firm by Cluett, Peabody & Co.



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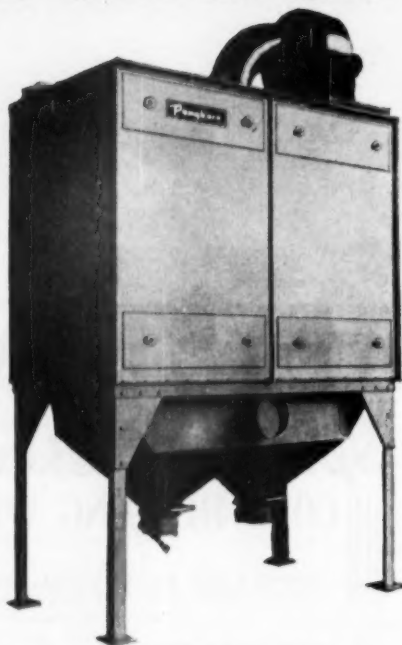
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## Accidental Mission

**MIAMI**—Back in October National Airlines bought a Sikorsky S-55 and announced plans to operate a helicopter service between Miami Airport and towns within about a 150-mi. radius. The idea, of course, was to "feed" new business into National's routes at Miami. Since the service was to be experimental only, National asked Civil Aeronautics Board for an "exemption" so that it could start service at once instead of going through the formal hearing procedures—which normally take many months.

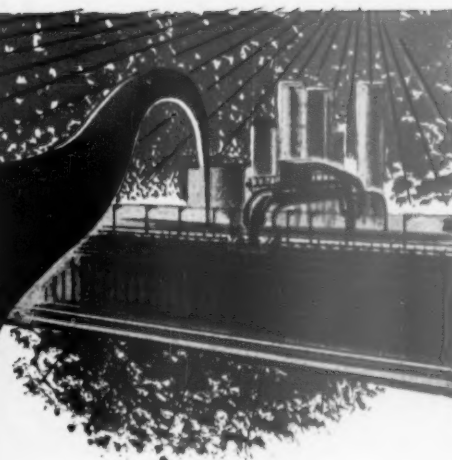
Only trouble is that two other lines—Eastern Air Lines, National's major competitor, and Southern Air Transport, a nonscheduled airline—filed formal objections to the exemption with CAB, and asked the board to make no decision without formal hearings. CAB is expected to decide next week; betting in the industry is that CAB will O.K. the exemption on a temporary basis.

But meanwhile National owns a helicopter, and it can't comfortably let that investment stand idle. So the line has been operating its S-55 on charter flights to such points as Palm Beach, Fort Lauderdale, Hollywood, Key West—and Hialeah Race Track (picture, above).

## Improving the Capitol

**WASHINGTON, D. C.**—There's no question that the nation's capital is far behind on public works needed to keep up with the tremendous population growth of recent years. But Washington's problem in getting the work done is more complicated than that of

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other cities—because Washington's only "city council" is the U.S. Congress. The city's budget and tax rates must be approved by the House and the Senate—and before that by both houses' powerful District of Columbia committees. Also, Congress pays part of the cost of running the district. That share used to be about 50%; it's only about 8% today, although the federal government owns more than 40% of the District's real estate. So the Bureau of the Budget has a say, too.

Two years ago the District commissioners proposed a \$350-million public works program, to be carried out over a period of eight years, and to be paid for in part by new local taxes, in part by federal appropriations. Leaders of the District committees and the Bureau of the Budget both balked.

Now the commissioners have come up with a new plan, cut down to \$306-million, and spread over 10 years instead of eight. The Budget Bureau has already agreed; a bill to put the plan into effect will be introduced in the new Congress early next month.

• **The Plan**—Biggest portion of the new money—\$112-million out of \$306-million—is scheduled to be spent on highways and bridges. Other major slices include \$37-million for water-supply facilities, \$35-million for schools, \$28-million for sewers, \$14-million for hospitals.

Cost of the program would be met in approximately equal thirds by higher federal contributions, U.S. Treasury loans, and new taxes on district residents—many of whom aren't too happy about that angle of the program. Of the \$10-million a year to be raised this way, \$4-million is to come from higher water rates plus a new sewer tax that will be figured at half the taxpayer's total water bill. Some \$1.6-million a year will come from increased personal income taxes, \$1.1-million each from higher taxes on liquor and on beer, \$750,000 each from boosts on gasoline and on cigarettes, \$500,000 from a higher tax on receipts of insurance companies, and \$400,000 from a new tax on telephone and telegraph service.

City officials and a broad-based Citizens Committee on Public Works are working hard to win support from the District's voteless citizens. Chances for success are considered to be good. The big hurdle, as usual, will be Congress, where the extra \$10-million a year the federal government is asked to kick in will run head-on into the 1954 economy drive.

## Arkansas Whiskey Trap

**LITTLE ROCK**—Arkansas has a higher state tax rate on distilled spirits (\$2.50 per gallon) than any of the adjoining states. Many residents have

## SOUND CONDITIONING



Proper acoustics in this switchboard room help keep wrong numbers at a minimum. Here, Armstrong's Cushiontone has been used on both ceiling and upper walls.



Efficiency in both appearance and operation characterizes this private office. Its Cushiontone ceiling not only absorbs distracting noise, it also helps reflect light evenly.



Customers find meals especially appetizing in Bullocks' Tea Room, for an attractive Travertone ceiling helps assure relaxing quiet at all times. Travertone, a fissured mineral wool tile, is completely incombustible.

In new California store

## overhead is an asset

In this Westwood, California, branch of Bullocks' Department Store, the ceilings are paying big dividends in popularity with both customers and employees. For these are modern, sound-absorbing ceilings of Armstrong's Travertone and Cushiontone. They soak up noise, help promote relaxing quiet that makes shopping fun and working pleasant.

In the Tea Room, a brisk business is always assured, for Travertone quiet makes good food doubly appetizing to hungry shoppers. Used also in the employees' dining room, Travertone is a

distinctively fissured mineral wool tile. Its unusually efficient absorption of high-frequency noises adds extra insurance against the harsh clatter of dishes and trays.

In the switchboard and office areas, mistakes have been minimized and efficiency boosted by noise-absorbing ceilings of Armstrong's Cushiontone. A perforated wood fiber material, Cushiontone is low in cost, easy to install, and economical to maintain.

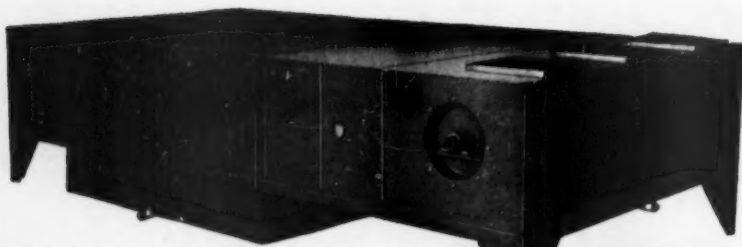
Your Armstrong Acoustical Contractor will be glad to give you full details on Travertone, Cushiontone, or any of

Armstrong's other sound-conditioning materials. For the free booklet, "How to Select an Acoustical Material," write direct to Armstrong Cork Company, 4212 Indian Road, Lancaster, Pennsylvania.



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been in the habit of running across the state line to buy a case or two of out-of-state whiskey, and sneaking it back home without paying the Arkansas tax.

Now the Arkansas Alcoholic Beverage Control Dept. is cracking down. State liquor agents, in radio-equipped cars, have been stationed in border cities of surrounding states. They watch the retail liquor stores for customers who come in Arkansas cars. When they spot an Arkansas buyer they wait till he starts toward home, then radio other agents waiting on the Arkansas side of the line. ABC Director Eli Collins says out-of-state buyers will be arraigned regardless of their "prominence."

Collins says he has already had a complaint from a liquor dealer in Seligman, Mo., just a stone's throw from the state line, that the crackdown is ruining his business. And Collins adds that a dealer in Helena, Ark., reports his business has increased sharply. Helena is right across the river from Mississippi; residents had found they could buy whiskey cheaper in that "dry" state than they could in Arkansas.

### LOCAL BRIEFS

**Chicago**—The Transit Authority's experiment with a special low fare for shoppers (BW-Oct.17'53,p36) was a dismal failure. For four Tuesdays in November, the authority charged a dime instead of 20¢ between 9:30 a.m. and 1:30 p.m. There were more riders—but not enough more. The experiment cost CTA \$43,960.

**Portland, Ore.**—Portland Gas & Coke Co. is getting more business than it can handle. So it has announced it will accept no more new customers for gas for space-heating in the large areas in and around Portland where it has reached the capacity of its distribution lines.

**Dallas**—Because of "severe operating losses," taxi fares in Dallas were raised last week for the third time in three years. The new rates are 45¢ for the first half-mile (up 10¢) and 10¢ for each additional half-mile (unchanged).

**Honolulu**—Matson Navigation Co.'s proposed new 11-story Waikiki hotel (BW-Dec.5'53,p115) won't be Hawaii's tallest building for long—in fact it may never hold the record at all. Plans were announced last week for an 18-story apartment building, which will be started in March, and may be completed before the new hotel. Tallest buildings in the islands today are only six stories.



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*Photograph by Leo Aarons*

## As a child believes

Christmas . . . brightest of all bright days in the lives of children, a day made memorable by a child, a day that children love.

And because nobody believes as a child believes, may we who are no longer children get back once again the shining faith of childhood; that for this one day at least we will see the world as a child sees it . . . big, and kind, and candy-good, and peaceful.

To shape this modern world of ours more to a child's image of Christmas is a challenge to us all. It is a challenge to industry, too, especially to the chemical industry which through research is charting progress in many fields and helping to bring about new developments and discoveries that make life better, healthier and happier for young and old everywhere.



*AMERICAN Cyanamid COMPANY*

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# INTERNATIONAL OUTLOOK

BUSINESS WEEK

DEC. 19, 1953



**There's a powerful momentum behind U.S. foreign policy today.**

Last week you had President Eisenhower's bold move on the atomic front.

This week Secretary of State John Foster Dulles put the strongest kind of pressure behind the European Defense Community. He warned France that the U. S. would have to reconsider its whole policy in Europe unless EDC went through.

At the same time Defense Secretary Charles E. Wilson told our European allies that they could expect to receive atomic weapons next year.

Add it up, and you have a diplomatic offensive that's meant to strengthen the West, put Moscow on the spot when the Big Four meet in Berlin (page 28).

Dulles had the full backing of Eisenhower and the National Security Council when he bluntly warned France about EDC. While at Bermuda, he cleared the move with Churchill and Eden.

Both Washington and London have long felt that France would have to be forced to a decision or it would continue to stall on EDC and the whole program of European unity.

As for timing, the French got the shove from Dulles now for two reasons:

- No new military aid can be given to the six EDC nations until the joint army is ratified. (Congress ordered a cutoff from Jan. 1.) Although there will be enough stuff in the pipeline for at least six months, the cutoff could become important if EDC is delayed that long.

- It was necessary to clear the air before the upcoming Berlin conference. Dulles figured that it was better to have it out with the French now than to risk a rift in front of the Russians at Berlin.

**There's no telling just what Molotov's game will be at the Big Four session.**

But Dulles has to be prepared for every kind of tricky maneuver—aimed primarily at detaching France from the Western Alliance.

For example, Molotov might offer a Soviet version of a European security system—with Germany united but neutralized and France tied by a loose alliance with Russia, Poland, and Czechoslovakia.

**The French were stung by Dulles' blunt words.**

What hurt them the most was the way Dulles treated France and Germany as equally responsible for past France-German quarrels. He also implied they were equally important to the U. S.

But don't judge the prospect for EDC by the first reaction in France. Chances are they will ratify.

For one thing, Dulles sweetened the pill by suggesting that the U. S. wouldn't insist that West Germany start in EDC with as many as the scheduled 12 divisions. And he pointed out that the U. S. has a long-run interest in keeping a proper balance between France and Germany.

# INTERNATIONAL OUTLOOK (Continued)

**BUSINESS WEEK**  
**DEC. 19, 1953**

The recess at Panmunjom could last for some time, perhaps until the Big Four meet in Berlin in January.

In the end, the Communists may throw the question of a Korean political conference into the United Nations.

A prolonged recess won't worry Washington much, nor will another U. N. debate on Korea. U. S. officials are sure we will get a vote of confidence in the U. N.

Meanwhile, Washington doesn't see any real danger that the Reds will start the shooting again. And Syngman Rhee has agreed to stand pat until the political conference actually meets.

—•—

**Britain is teetering on the brink of severe labor strife.**

There's the threat of a paralyzing strike of 600,000 railwaymen, which would shut down Britain's railroads over the Christmas week. The unions demanded the equivalent of \$2.80 weekly increase, got 60¢ and reacted bitterly.

While there was talk of a tentative "peace plan" at midweek, sparing the Christmas travelers, the wage issue will continue to rankle.

Other big, powerful unions are demanding a rise. Engineering workers have already staged a one-day quickie walkout. Other unions threaten slowdowns. Labor leaders talk darkly of "unsolved wage problems," hinting of the drastic effects of labor unrest on the British economy.

Economists and businessmen agree. But they fear that a general wage increase will boost British costs to a point where vitally important exports would suffer.

—•—

China trade is more and more of a headache for the Administration. European and Japanese pressure to relax the trade embargo is growing. Sen. Joseph R. McCarthy's campaign to get tough with allies who trade with the Chinese Reds has gained some influential supporters.

Officially, the U. S. says no change until there's a Far East settlement with Peking. Privately, many officials predict that—instead of being tightened—bars on China trade will be eased within six months, to a level, say, of the present restrictions on trade with the Soviet Union.

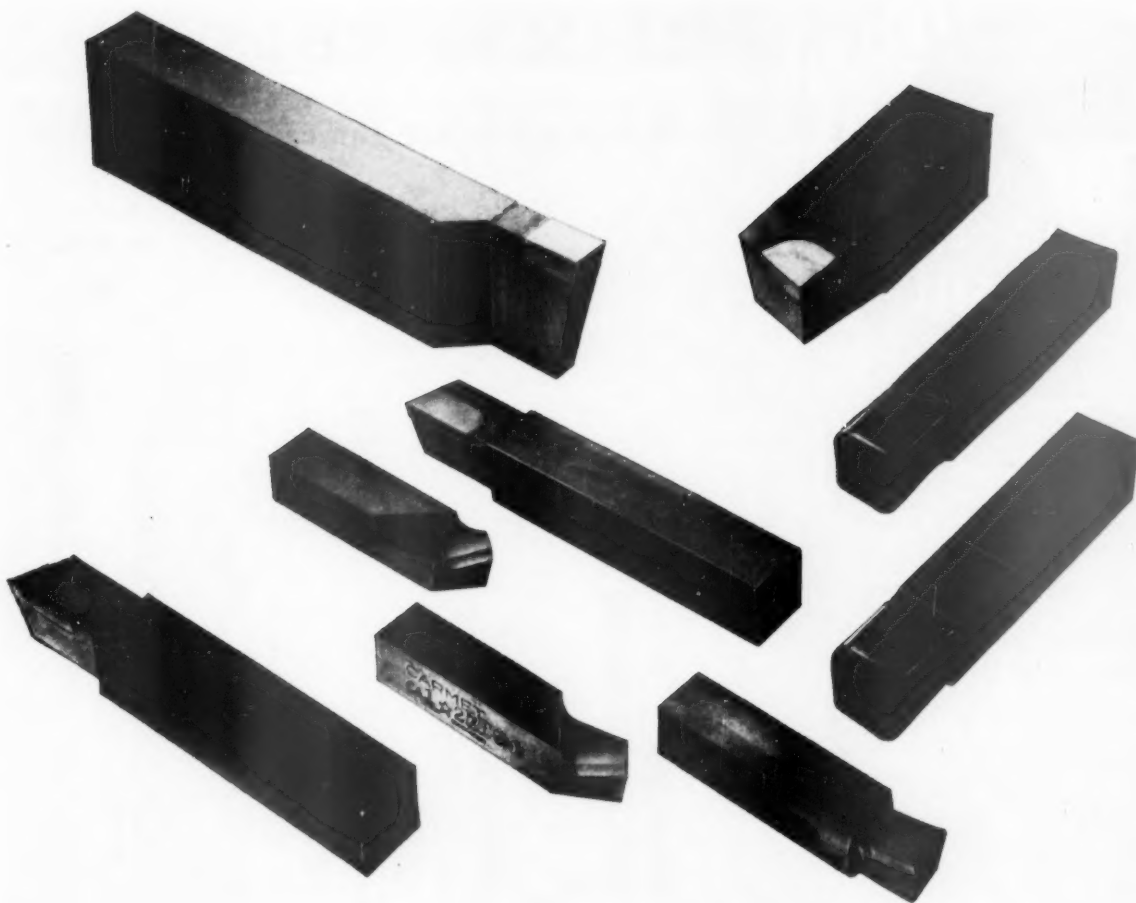
—•—

There are rumors that the Administration plans a quick follow-up to President Eisenhower's proposal for an international atomic agency. It may be that a detailed, long-range world atomic development program is on the drafting board.

The goal would be nothing less than making deserts bloom by installing atomic power piles in power-hungry, underdeveloped areas. Irrigation of the Sahara, using nuclear power to convert sea water, might be a top-priority scheme. Other obvious candidates might be India, the Levant, Egypt, sections of Latin America.

There's an element of pipe dreaming in all of this, to be sure. Experts agree that, at best, mass production of atomic power is five to 10 years away.

But proclamation of such a policy right now by the U. S. would make it much more embarrassing for Moscow to spurn the proposed United Nations atomic pool.



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## DIVIDEND NOTICE

The Board of Directors of the Kearney & Trecker Corporation has declared a quarterly dividend of twenty-five (25¢) cents per share, payable December 15, 1953 to the shareholders of record December 1, 1953.

The Directors also declared an extra dividend of twenty-five (25¢) cents per share, payable January 5, 1954 to shareholders of record December 15, 1953.

Signed:  
R. L. BISCHOFF  
Secretary and Treasurer



**Kearney & Trecker Corporation**  
Milwaukee 14, Wisconsin

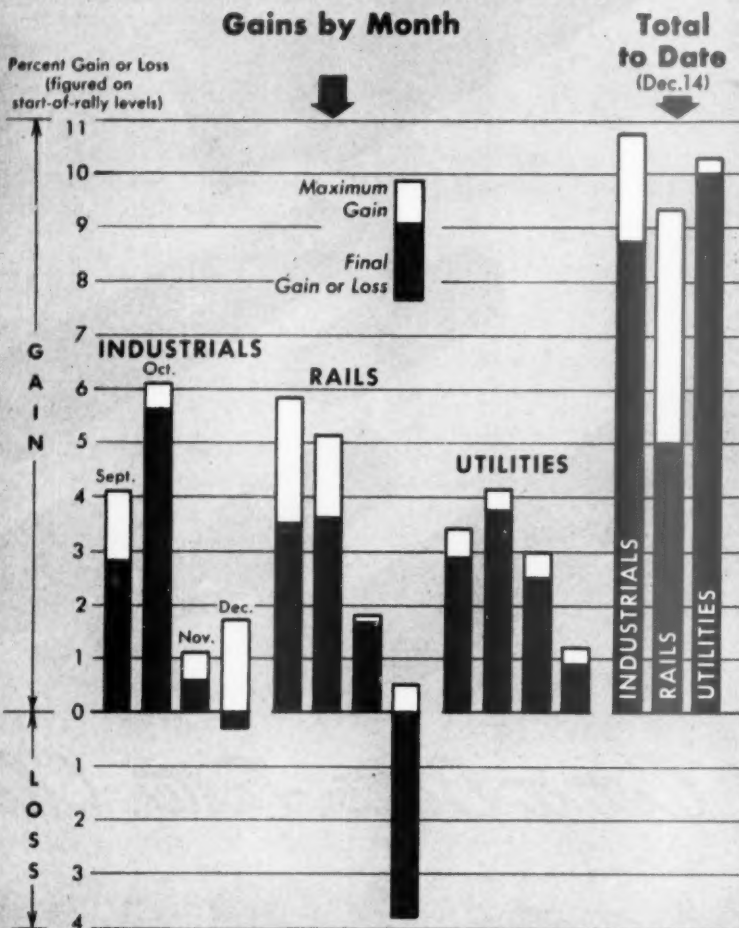
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**clues**

# THE MARKETS

## Box Score on the Fall Rally in Stocks



Data: Standard & Poor's Daily Stock Price Indexes.

© BUSINESS WEEK

## Bulls Refuse to Worry

Some of the steam seems to have gone out of the stock market's rally from last September's lows (chart).

Trading this week covered a wide range of issues; daily volume ran around 1.5-million shares. And more new lows were recorded on Monday and Tuesday than on any days since September.

Still, Wall Street bulls said they weren't worrying. Over-all losses, they pointed out, were small. Stocks started to rally sharply at midweek, which the bulls took to mean that the wave of year-end tax selling was subsiding.

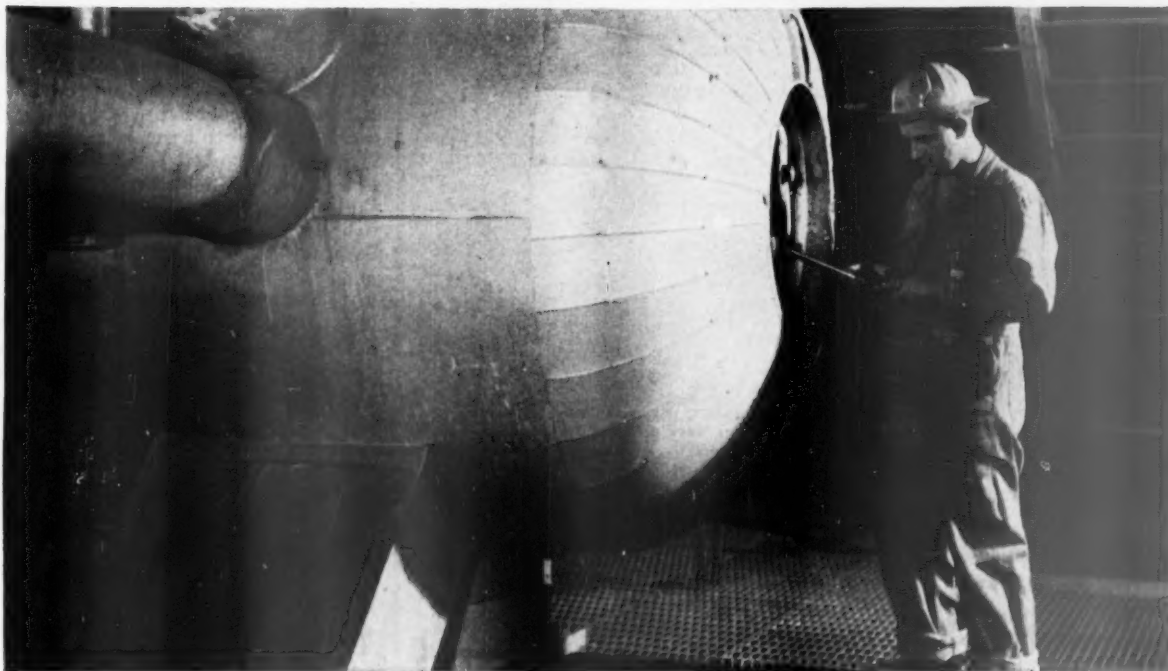
The bulls also pointed with pride to the performance of the indexes. Standard & Poor's index of industrials has

clung to all but a minor part of its peak 10.7% recovery from the September low. The rail index still holds more than half of its maximum gain of 9.3%—despite recent moanings. The utilities index has kept almost all of its 10.3% peak gain.

• **Best Actors**—Among the bigger recoveries from September lows were those registered by these groups: electrical equipment 24.8%; tires and rubber goods 22.4%; aircraft manufacturing 20.3%; aluminum 20.1%; paper 16.6%; machine tools 16.5%; metal fabricators 16%; printing and publishing 15.9%; auto trucks 15.6%; finance companies 14.1%; metal containers

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For complete information and estimates on cleaning your equipment, call the nearest Dowell office, or write directly to Tulsa, Dept. L-10.

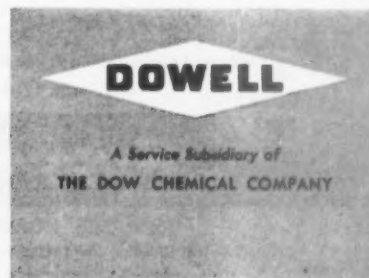
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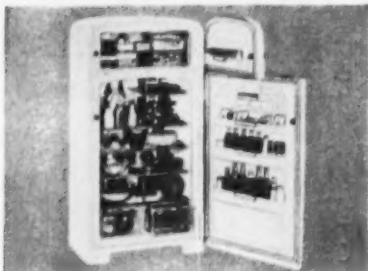
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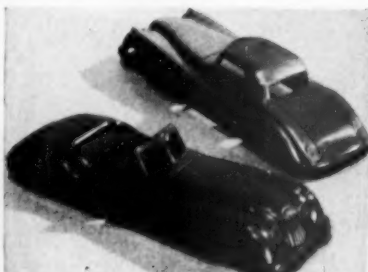
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| <b>MC-305</b> | High Impact, Easy Flow                              |
| <b>MC-309</b> | High Impact, Highest Heat Distortion Temperature    |
| <b>MC-401</b> | Medium Impact, Improved Heat Distortion Temperature |
| <b>MC-405</b> | Medium Impact, Easy Flow                            |
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12.9%; steel 11.5%; utility holding companies 11.2%; auto parts and accessories 10.9%; ethical drugs 10.3%; glass containers 9.9%; chemicals 9.8%; utility operating companies 9.6%.

The market coin has an obverse side; some groups are selling under the September lows. These include: carpets and rugs 7.8%; 5¢, 10¢ and \$1 stores 1.6%; U. S. gold mining 3.8%; leather companies 3.8%; rayon and acetate yarn 7.9%; shipping 7%; sugar companies 3.8%; textile weavers 2.4%; and tobacco companies 15.6%.

• **Opened High**—Taken as a whole, 1953 hasn't been all peaches and cream for the bulls. As the year came in, the market was close to the crest of the Eisenhower election upsurge. Soon this began to peter out. Once the Wall Street community began to realize that the postwar boom was probably due to start leveling off, stock prices began to do the same. Ending of the Korean fighting—with the prospect of defense cutbacks—helped to speed the long decline that ended with most vulnerable issues touching 1953 lows in September.

Only the utilities—known for their ability to perform well when the going is rough elsewhere—are approaching the close of 1953 with a net gain.

S&P's utilities index stands about 3.8% above the level at the beginning of the year. The industrials index is off 6.2%; the rail index, reacting to a drop in freight loadings, is down 15.4%.

## Stock Dividend Trend Has Traps in It

Should stock dividends be considered the equivalent of cash dividends?

If you are a stockholder—and don't want to be misled—that's a question that is worth thinking about. Here's why:

(1) Paying dividends in stock in lieu of cash or to supplement cash disbursements is becoming increasingly popular among corporations.

(2) In the process, stockholders in too many cases are being subjected to barrages of semantics that becloud the operations rather than put them in the clearest light.

Take two points in this connection. Despite all the management claims you've heard to the contrary:

• Stock dividends should never be considered the equivalent of a cash disbursement.

• Payment of a dividend in stock instead of cash never actually reduces the income tax liability of a recipient.

• **Reasons**—Obviously, the high ratio of retained earnings to total profits in recent years has been the main reason for the stock-dividend trend now under

way. A stock dividend freezes into the business earnings that have been withheld; when a company declares a stock dividend, bookkeeping demands that a sufficient amount of "earned surplus" be switched to a company's "capital account" to keep the record straight.

Many companies argue that use of stock dividends has been forced upon them by their money needs. If they were forced to pay any large portion of their earnings out in dividends, they say, new financing would subsequently be necessitated. If this took the form of debt borrowing, it would hit the position of their stockholders, and if new stock had to be sold it would be even worse. The chances are, it's explained, that a new stock issue would dilute their present stockholders' position to some degree, perhaps even sharply; it is doubtful these days that stock could be sold at any price reasonably near its book value.

Stock-dividend declarers claim—and quite rightly—that any dividend, cash or stock, temporarily dilutes the underlying book value of the individual shares until such time as normal growth restores to surplus an amount equal to the dividend disbursed.

• **Difference**—Collecting a cash dividend, however, doesn't disturb in any way the proportionate share a stockholder has in the business. Translating a stock dividend into cash does. That's what many stockholders haven't yet recognized.

A stock dividend is no more a "dividend" than a straight stock split is. Like the latter, it in no way increases a stockholder's interest in a corporation.

• **What About Taxes?**—How can cuts in income tax liabilities result from stock dividends? Here's the pitch, according to many managements:

A cash dividend payment has to be included in your income tax return as regular income. Thus it is subject to the normal rate applying to the tax bracket you happen to occupy.

That's not the case, however, when it comes to cashing in stock dividends. These are not taxable income. Nor can they ever be turned into taxable income—even when disposed of. When you sell any shares you have received as a dividend, the worst possible result, tax-wise, is a capital gain on which the effective federal rate, at the moment, can't exceed 26%.

True enough, you only have to pay a maximum rate of 26% on any gain from the operation. But no real tax saving is involved. What you have just done with, say, a 10% stock dividend you could very easily have accomplished before you received it—merely by selling one-eleventh of your original 100-share block. In other words, in no way did the declaration of the stock dividend change the picture.

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## LABOR

# Supreme Court Sharpens Taft-Hartley Issues

The Supreme Court came to grips with the Taft-Hartley act in three cases this week and last. It handed down decisions sure to have an impact on upcoming deliberations by Congress and the Administration on changes in the federal labor law (BW-Dec.12'53, p160).

The high court ruled:

- State courts do not have the power to interpret and enforce the T-H act.

- Franchised auto dealers come under the federal law.

- An employer has the right, under Taft-Hartley, to fire employees who circulate "derogatory" handbills against the employer without relating the criticism directly to issues in the labor dispute.

The first two decisions, announced by the court this week, are highly important. The first reinforces two previous rulings by the high court that give Taft-Hartley precedence over state labor laws. Without a doubt, it will increase demands for a clause in the T-H act clarifying and strengthening states' rights.

The second may also have an impact on lawmakers, since it broadens the interpretation of present Taft-Hartley coverage at a time when there are complaints that the coverage already is too broad.

- **Federal versus State**—The Supreme Court's decision on state vs. federal jurisdiction came in a Pennsylvania trucking case—originally the case of Garner Bros., of Harrisburg, Pa., but bearing the name of Central Storage & Transfer Co. on the Supreme Court's docket.

The Teamsters (AFL) posted non-employee pickets at Central Storage's loading platform in 1949, during a drive to organize the firm's 20 employees. Union drivers employed by other companies refused to cross the picket line. Central Storage's business fell off a claimed 95%, and the company sought—and got—a state court injunction barring picketing.

The writ was issued on grounds that the picketing violated Pennsylvania's labor relations act—which, in terms identical to those in the Taft-Hartley law, makes it an unfair labor practice to force an employer to encourage or discourage union membership.

The Teamsters fought the injunc-

tion, complaining that Central Storage should have sought relief through the National Labor Relations Board—as required under the Taft-Hartley act—instead of going into state courts. First the Pennsylvania State Supreme Court, and this week the U. S. Supreme Court, upheld the position of the Teamsters and NLRB.

Both held that if an unfair-labor-practice situation is covered by federal law, then a state is precluded from acting on it.

- **Will of Congress**—The U. S. Supreme Court opinion written by Justice Robert Jackson points out that Congress did not "merely lay down a substantive rule of law to be enforced by any tribunal," but confided "interpretation and application of its rule to a specific and specially constituted tribunal (the NLRB) and prescribed a particular procedure" to be followed.

Justice Jackson noted that T-H "leaves much to the states," but added that Congress failed to be specific about how far the states may go. Courts must decide that, he said, by spelling out "from conflicting indications of congressional will the areas in which state action is . . . permissible."

The present decision is based on the belief that "Congress evidently considered that centralized administration of specially designed procedures (is) necessary . . . to avoid . . . diversities and conflicts likely to result from a variety of local procedures and attitudes toward labor controversies."

In the two previous states' rights cases, the high court held (1) states can act if NLRB is without "express power" under T-H to prevent damage to someone, and (2) if there is mass picketing or some other form of pressure that threatens public safety.

Another case on the docket has much the same issue as the Garner-Central Storage case. It involves the Kinard Construction Co., of Russellville, Ala., and the AFL Building Trades Council.

- **T-H Jurisdiction**—The high court decision that franchised auto dealers come under Taft-Hartley also has far-reaching importance. It upholds a contention that dealers who are connected with "a nationwide distributing system" are in interstate commerce, and therefore under Taft-Hartley jurisdiction.

This decision may affect not only auto dealers but also many thousands

of franchised retail merchants in other fields—sellers of electrical appliances, for instance. It means that unions can use T-H to back up efforts to organize and bargain for employees of dealers even though the retailers' operations are confined within one state.

The case came up after the International Assn. of Machinists (AFL) filed an unfair-labor-practice complaint against Howell Chevrolet Co., of Glendale, Calif., charging management with refusing to bargain with a union designated by employees, and with discharging an employee for union activities.

Howell fought the case, challenging NLRB's jurisdiction because, the company said, its business is all within one state. The high court's eight-to-one decision against the company ruled that a firm that is "an integral part" of General Motors' national system of distribution—or of any other similar to it—can't claim it is not in interstate commerce and therefore is exempt from Taft-Hartley rules.

• **Issues Only**—The third case decided by the court—less important but none-

theless stirring up a lot of interest in both management and labor—upheld the right of an employer to fire striking employees who publicly deride the employer's product without relating the attack to a labor dispute.

The six-to-three decision approved NLRB's handling of a 1949 labor dispute that involved television station WBTV in Charlotte, N. C., and technician members of the International Brotherhood of Electrical Workers (AFL). Nine strikers circulated handbills criticizing the quality of WBTV's programs. After the strike ended, Jefferson Standard Broadcasting Co. discharged the men. IBEW filed unfair-labor-practice charges with NLRB, but the board dismissed them. The union appealed the decision.

The high court agreed that NLRB was right: The strikers were fired for "cause"—in the WBTV case, disloyalty—and the method of attack deprived the strikers of the right to invoke T-H provisions protecting "concerted activities for collective bargaining."

• **No Precedent**—A dissent by Justice



## GE Lynn Workers Again Pick Rightwing IUE

General Electric Co. production workers at Lynn and Everett, Mass., last week voted—for the third time since 1949—to be represented in bargaining by CIO's rightwing International Union of Electrical Workers. GE employees voted 5,546 to 4,806 against the leftwing United Electrical Workers, with 533 challenges and 64 votes for no

union. The National Labor Relations Board election climaxed months of high-gear campaigning among the two plants' 12,000 employees. The narrow margin of IUE's victory is widely interpreted as a sure sign that tension will continue, with UE standing by to force another showdown when—and if—possible.

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**600 BRANCHES ACROSS CANADA... RESOURCES EXCEED \$2 BILLION**

Felix Frankfurter is significant. The WBTV and lower federal courts "will hardly find guidance" in it because other cases might be similar but not precisely the same as the one just decided. Each decision must depend on the criticism made, and how it relates to issues in a dispute, the dissent held.

Justice Frankfurter also predicted the WBTV decision, opening up new free-speech questions, might "needlessly stimulate [T-H] legislation."

## UAW's Pension Figures Give Bargaining Guide

How well has the United Auto Workers (CIO) drive for industrial pensions paid off? UAW's Social Security Dept. asked that question in the union's newspaper last week, and answered it with an impressive figure: Since 1950, it reported, 33,395 auto workers have retired on pensions.

Of the total, more than 90% (or 30,932) retired at the normal pension age set by contracts. One-fourth, or 8,402 workers, left jobs in General Motors plants, and 7,025 retired on Ford Motor Co. pensions.

Of the small percentage of retirees who left plants before age 65, 1,799 left jobs on part pensions under the disability retirement provisions in contracts, and 664 quit before age 65, receiving reduced benefits.

To get these breakdown figures, UAW researchers inquired into retirements under contracts of 16 major employers and many smaller ones. The figures are as of last Oct. 1.

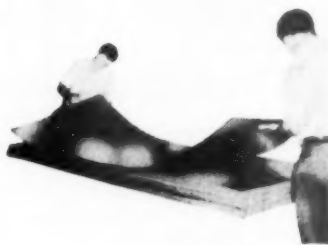
• **Guide**—And they are significant: The present levels and coverage of industrial pensions will be a major bargaining issue in 1954—with unions asking for big jumps in employer payments (BW—Oct. 31 '53, p150). When negotiations get under way—particularly in the steel industry in midyear—the whole background of present pension programs is going to be scrutinized closely, by labor and management alike.

The figures of UAW, a pioneer in the pension field, will provide much of the data.

**The Pictures**—George Cullen—72 (bot.); Harris & Ewing—29 (top rt.), 31 (top lt.); I.N.P.—31 (top rt., bot.); Bob Iscar—cover, 41, 42, 102, 104, 106; Herb Kratovil—72 (top, middle lt., middle rt.), 73 (middle lt.); 130 bot. lt.); McGraw-Hill World News—142; Ed Miley—50, 51; Howard Staples—120; U.P.—30, 31 (top ctr.), 82, 159; W.W.—144.



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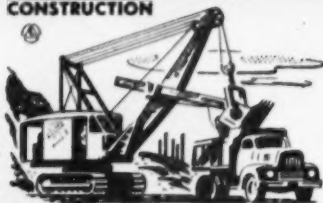
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Union interest in promoting the sale of employers' products came into the news twice last week:

- Concerned over the rising volume of sales of low-priced, nonunion hosiery, the American Federation of Hosiery Workers (AFL) announced that union-label hosiery will be sold to members and their friends at wholesale prices, through union offices.

- At the same time, a Studebaker Corp. local of the United Auto Workers (CIO) ran into trouble through even stronger support of its employer's products.

- **Studebakers or Else**—Several months ago, UAW's Studebaker Local 5 took a worried look at sales prospects in the automotive industry and issued a blan-

## THE LABOR ANGLE

### After Annual Wages, What?

**"WHAT WILL THE UNIONS WANT** after they get annual wages?" the man at the lunch-con table asked no one in particular.

He had been discoursing on the annual wage demand that the union in his plant had just notified him would be its major goal in negotiations scheduled to open in another month. His question was purely rhetorical, or was meant to be. He delivered it with some heat, as if it were the final, conclusive point in the argument he had been making against the practicality of annual wage guarantees.

But one of the men at the table took it seriously, repeated it with a bemused air, then commented, "Now that's an interesting question."

The man who had tossed it out was taken aback. He wanted to go on with the discussion he had launched. He actually made a beginning, with some such phrase like, "as I was saying . . ." as if he were intent on brushing aside an unwelcome interruption. Then, suddenly, as if he had only then heard his own question, or its meaning had only then hit him, he swallowed hard. You could see on his face that his mind was shifting gears. He said, "Well, what will they want after that?"

Everybody started talking at once. At first it sounded serious. Soon, though, it began to sound absurd. Everyone tried to top the last-expressed idea. Then the man who had started it all by taking the question out of its original context

and laying it on the table by itself, brought the conversation and the lunch to an end. "I suppose we can say," he said, "that the unions will never stop. They'll keep wages up as high as they can; cut hours as much as they can. And these fringe benefits that used to seem like a little frosting on the cake will become the central core of their programs. Womb to tomb protection is what they're really after."

**I**N ACTUAL FACT, the unions themselves have not done much thinking beyond the annual wage. It's now the big goal and it puts everything else—except the traditional wage and hour demands—in the shadow. But once it is achieved, there isn't much doubt that other "social gain" objectives will come to the fore. It's only a matter of time.

Financing college educations for children of employees in the bargaining unit could be one such objective. Providing for nursery care of youngsters might be another. By and large it is safe to assume that the unions will eventually get around to asking that employers provide just about everything that families of wealth provide for themselves.

Let one such gain be won and you will see the demand for another develop. That's been the history of union dynamism: from wages to vacations to pensions to health and welfare benefits to annual wages. Terminal points are unknown in union orthodoxy.

ket order to members in South Bend, Ind. In the future, it said, all who work in the Studebaker plant and who drive cars must purchase and drive Studebakers.

The union said in effect to them: You make these cars and can buy them at a 20% discount. If you pass over the Studebaker to buy and use any other make of car, you are creating a doubt in the minds of prospective buyers about the value of the automobile you make. You may discourage sales, and thus jeopardize jobs.

• **No Sale, No Job**—Ten company employees who own other makes of cars refused to comply with the union's order to buy Studebakers. When this happened, according to testimony before the National Labor Relations Board, the union demanded that the company discharge the 10 men. The union said other employees would refuse to work with them if they stayed on the payroll. Faced with that threat, the company discharged the men.

Last week, Ross M. Madden, Chicago regional director of NLRB, issued a formal unfair-labor-practice complaint against Local 5 and the company, accusing them of discharging workers in violation of the Taft-Hartley act. T-H bars firing workers on union demand for any reason except nonpayment of union dues and initiation fees.

## New Employers' Group Opens National Offices

A new employers' organization opened offices in New York's Chatham Hotel this week. Its announced objective: "encouraging harmonious and equitable management-labor relations."

The new organization—incorporated in New York as the Employers Labor Relations Information Committee, Inc.—is headed by Reuben B. Robertson, Jr., of Cincinnati, president of the Champion Paper & Fibre Co. (BW—Aug. 1 '53, p94). Its general manager, on loan from Champion Paper, is Brandon Hodges—a former North Carolina state executive.

Among its directors are corporation heads Ralph J. Cordiner of GE, Ben Fairless of U.S. Steel, John L. Collyer of Goodrich, C. R. Cox of Kennecott Copper, and Roy C. Ingersoll of Borg-Warner. An initial budget topping \$250,000 will be raised by membership contributions.

The founders say they felt a need for an organization of "progressive management." Why a new one? Committee spokesmen explain their group will "deal exclusively with industrial relations, while others spread their activities over many different fields of activities."

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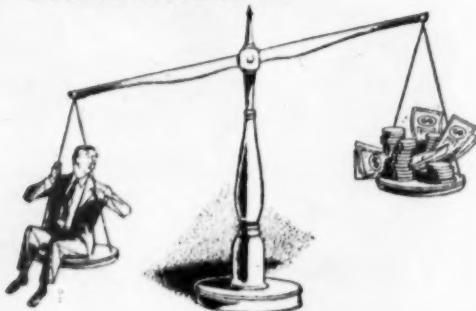
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## Setback for UAW

It took a licking in settling North American Aviation strike on terms the company offered at the start.

Local 887 of the United Auto Workers (CIO) at North American Aviation, Inc., polled its members last July: "What do you think the union should ask for in wages during fall negotiations?" One member replied, "Ask for 10¢; settle for 5¢. Don't be crazy and ask for a quarter" (BW—Aug. 8 '53, p. 114).

At the time the reply seemed humorous but before the union accepted NAA terms and settled its 52-day strike last weekend, plenty of members wished Local 887 had followed the advice.

By the time the new contract was negotiated and signed by union and company, more than 50% of strikers had already gone back to work. Ratification of the agreement by the workers this week was an empty procedure.

• **First Offer**—No amount of propaganda from UAW can erase the fact that the union took a licking in the NAA strike. Members got in economic benefits exactly what the company offered before the walkout, a 4% raise. They lost ground on a key noneconomic issue, with a modified union-shop clause being replaced—at NAA insistence—by maintenance-of-membership. Strikers lost an average \$650 in wages.

Even union officials admit the strike was "sort of a fizzle," although they say they won "some" concessions from management. They explain the setback in two ways:

• The timing was bad—too close to the holidays. Strikers, worried about a skimpy Christmas, returned to jobs.

• Other settlements in the aircraft industry, by the International Assn. of Machinists (AFL), were "a blow to us." They left UAW out on a limb because IAM's settlement terms were close to NAA's pre-strike offer.

• **Mutual Aid**—Publicly at least, nobody in UAW is accusing IAM of bad faith in connection with the ambitious, interunion mutual assistance pact they signed last October (BW—Oct. 17 '53, p. 175).

A Los Angeles UAW official commented that "cooperation with IAM is moving along. It takes a while to build up really effective collaboration." IAM raised funds to help the NAA strikers, and otherwise assisted them.

The same official said that IAM's quick settlements at the El Segundo plant of Douglas Aircraft Co. were particularly damaging.

Mulling things over, the official says

the settlements were the only place IAM let its erstwhile rival UAW down. Summing it up, he says that "perhaps IAM did the best it could, under the circumstances." Machinists officers feel that bonds with UAW are now "stronger than ever."

IAM for its part says that while UAW bore the brunt of bargaining against NAA, the Machinists are carrying on a fight in the East against another important aircraft employer: Pratt & Whitney Aircraft Division of United Aircraft. Bargaining is deadlocked there, and IAM employees at Hartford, Conn., have authorized their negotiating committee to call a strike—if necessary—after Jan. 1. This dispute involves some important noneconomic demands as well as wages.

In western bargaining, IAM denies undercutting UAW's wage demand. It settled for less, but got what an IAM spokesman called "wage boosts comparable to those in steel and other industries this year."

• **The Terms**—IAM signed with Douglas Aircraft Co. for a blanket 5¢-an-hour raise, plus 5¢ for workers in 17 upgraded classifications. At Lockheed it got a 5¢ hourly increase, 1¢ cost-of-living pay hike, and 5¢ to 12¢ raises in 14 upgraded classifications.

UAW's agreement this week with North American calls for a general 4% increase—a minimum of 8¢ up to 20¢ an hour, including additional increases in some grades. The union asked originally for a 26¢ raise, which it said would bring airframe rates up to those in the auto industry. The union counts the part-failure in this parity fight at NAA (BW—Oct. 31 '53, p155) as a disappointment.

The contract calls for six paid holidays, with payments due even if the holidays fall on weekends; three-week vacations after 15 years; and an increase in disability and health insurance.

The pact also provides for corporation-wide bargaining and for maintenance-of-membership.

The old contract had a modified-union-shop provision making union membership a condition of employment.

The new m-of-m clause requires all present members, and all who subsequently join the union voluntarily, to stay in for the duration of the contract. It does not make joining the union a condition of employment.

UAW opposed the company's m-of-m proposal in the final stages of bargaining, calling it a "union busting" demand. Under it, the union complains, strikers who quit the local to return to jobs during the walkout can stay out of UAW and still hold jobs. Before the strike, UAW had 26,785 members among NAA's 33,453 employees.



## "CASE" HISTORIES FROM ATLAS PLYWOOD'S SHIPPING CONTAINER CLINIC

(Safe-Transit Certified)

New case designed by Atlas Plywood engineers weighs 47% less than previously used wooden box . . . holds contents more securely . . . reduces shipping costs

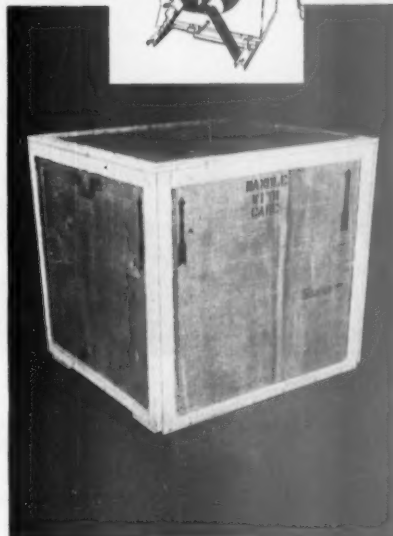
## THIS CASE WASTED MONEY

This cumbersome wooden box was the container previously used for shipping a unit cooler\*. On arrival at the Atlas Plywood Shipping Container Clinic, the gross weight of box and contents was 220 pounds. Because of inadequate blocking, the cooler was loose in the box.



## THIS CASE SAVED MONEY

After thorough laboratory investigation, Atlas Plywood engineers designed this plywood case. Much stronger, and with more secure blocking than the old wooden box, it is a safer shipping container. And being 47% lighter than the box—41 pounds as against 77 pounds—it reduces the gross weight by over 16%, for a considerable cut in shipping costs!



\*Cooler made by Bush Manufacturing Co., West Hartford, Conn.

## CAN YOUR SHIPPING COSTS BE CUT?

There's one sure way to find out. At no cost or obligation to you, your present shipping containers can be tested in the Atlas Plywood Shipping Container Clinic, on equipment that simulates all conditions of actual transit. If improvements are needed in your container design, Atlas Plywood engineers will submit them for your approval.

It should then be pretty clear to you whether you can reduce your shipping costs, including what you pay for shipping the container and what you pay for damages.

This free service by Atlas Plywood — *the greatest name in plywood* — includes an invitation to come along and watch the tests. Your Atlas Plywood representative (see Classified Telephone Directory) will be glad to make the arrangements. Or write to Atlas Plywood Corporation, 1432 Statler Building, Boston, Mass.

# Atlas Plywood

CORPORATION  
FROM FOREST TO FINISHED PRODUCT

PLYWOOD CONTAINERS • FLUSH DOORS • HARDWOOD PANELS





Here's a flagman doing an unnecessary job—warning oncoming trains of a delay caused by a hot box.

As you know, hot boxes cause more unscheduled stops than anything else—costly, needless delays in freight movements.

**SKF FREIGHTER** Roller Bearings eliminate hot boxes. They're called **FREIGHTER** because they improve rail freight movement—and profits—in eight important mechanical and economic ways.

**SKF** Engineers and America's railroads have worked together to develop **SKF's FREIGHTER** Roller Bearings—a product of the world's widest experience in the application of anti-friction bearings to passenger and freight cars and motive power.

7847

**SKF INDUSTRIES, INC., PHILADELPHIA 32, PA.**  
— manufacturers of **SKF** and **HESS-BRIGHT** bearings.

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# SKF

## FREIGHTER ROLLER BEARINGS

## Check List . . .

. . . on management personnel policies gives employer chance to take stock of his company's practices.

Most employers these days know the importance of personnel relations and know how to manage their work forces intelligently. But knowing a thing is not always the same as doing it. The Commerce & Industry Assn. of New York, Inc., feels management can use a little nudging now and then.

To set member-companies thinking and to encourage them to take stock of how well they're handling employee relations, the association's personnel management division has just issued a booklet of questions that probe into personnel practices.

• **Self-Analysis**—Employers who want to assess their policies are urged to answer such questions as:

• Do you maintain close contact with operating supervision to help insure selecting the best people and placing them in the right jobs?

• Do you have a good induction program for new employees to acquaint them with their new work, associates, and surroundings, or are they largely left to their own devices to learn the ropes?

• Do you have a program for regularly appraising the job performance of your employees?

• Do you get full value from your merit-rating program by using it as a device for letting employees know how they are doing and for counseling with them to improve their job performance?

• Is your vacation plan and holiday schedule in line with general practice in the area?

• Are you careful to inform your employees of anticipated changes in company operations well in advance to help them adjust to changes affecting their jobs?

• Do you have a prompt and orderly method for considering and acting upon employee problems and complaints?

• If you have a union, do you make collective bargaining operate as a "two-way street" in which management presents a strong case for the clauses it wants in the labor contract?

• Do you systematically attack turnover by attempting to learn the reasons why employees leave your company, and, where possible, remedy the conditions responsible?

These questions are a scant sampling. The full set of questions in the C&I booklet is a complete self-examination for employers.

## Annual Wage . . .

. . . gains ground in St. Louis warehouse field. It may spread nationally in the Teamsters union.

Warehouse operators who deal with AFL's Teamsters may find it necessary to bargain on a guaranteed-wage demand by the union in 1954. St. Louis Local 688 of the Teamsters has been successful with the demand during 1953, and the union's big and aggressive warehouse division is very interested. The word is that the St. Louis demand might become a national one.

• **Spreading**—Local 688 recently signed its 51st St. Louis warehouse operator to an annual-wage contract. At the same time, it extended the coverage of its guarantees into the wholesale grocery business.

The St. Louis local's agreements now assure 50 weeks' work—or pay—for 2,725 top-seniority employees of the total 4,214 on the payrolls of the 51 covered firms. The number of workers whose pay is guaranteed varies from firm to firm. Based on the minimum employment in each warehouse during the preceding year, the number ranges from 50% of those on the payroll to—in a very few instances—100%.

Local 688 tried out its annual-wage demand a year ago in contract negotiations with Brown Shoe Co. (BW—Jan. 31 '53, p. 130). It offered a five-year agreement incorporating the guaranteed wage, pay increases spread over the contract period, and other terms intended, the union said, to assure "maximum labor peace" in St. Louis warehouses. Brown Shoe accepted the terms, and, after a slow start and some resistance, other employers followed the shoe company's lead.

• **Room to Grow**—The 51-employer coverage doesn't mean Local 688 has blanketed its field. In all, it has contracts with 300 firms employing about 10,000 persons. According to the local, the guaranteed-wage plan isn't practical for all of them, but ultimately the union "hopes" to have some 7,000 workers covered.

Contracts negotiated during the year differ in minor details, but the guaranteed-wage program is essentially the same in all of them. The agreements assure high-seniority employees 40 hours of work a week for 50 weeks—including vacation periods—each year. Overtime doesn't count against guaranteed hours. Moreover, if employees refuse to cross a picket line posted by another union in a labor dispute, the lost hours of work aren't subtracted from the guaranteed total; hence, em-



Above: Concrete aprons constructed at Eastern's Maintenance and Operations Base in Miami, Fla., the largest commercial air base in the world.  
Left: E. V. Rickenbacker, Chairman of the Board, Eastern Air Lines.

EASTERN AIR LINES CHOOSES

## Concrete Paving

FOR LOWEST ANNUAL COST

Captain Rickenbacker realizes the lasting economy of investing in the finest equipment and materials. That's why, when Eastern Air Lines had a 29-acre paving job to do at its Miami, Fla. base he and his engineers specified concrete pavement.

With an eye to the future, Eastern built a concrete apron that will support aircraft weighing 200,000 pounds!

Like Eastern, the public is turning more and more toward **low annual cost**. This trend naturally suggests concrete—the real **low-annual-cost** paving material for driveways, alleys, streets and highways, as well as for airport runways and parking aprons.

## PORTLAND CEMENT ASSOCIATION

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A national organization to improve and extend the uses of portland cement and concrete . . . through scientific research and engineering field work



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KITTY HAWK, N. C.

## They, Too, Chose ACCESSIBLE NORTH CAROLINA

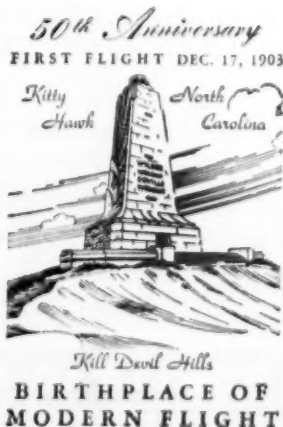
... where, on the Golden Anniversary of the First Flight, industry continues to enjoy the advantages of easy-to-get-to isolation.

Your plant in North Carolina is "accessible" to a large, dispersed labor force... raw materials... abundant power... the world's major markets. Yet, there is "isolation" from dangerous congestion, crowded living conditions and unstable labor.

For a list of industrial sites and buildings and other information, communicate with

Ben E. Douglas, Director

DEPARTMENT OF CONSERVATION AND DEVELOPMENT, RALEIGH, N. C.



players may have to pay for idleness in secondary boycotts.

• **Untested**—So far, according to the local, the guarantee program is working "splendidly"—since employment has been high enough in St. Louis to bar warehouse layoffs serious enough to affect the high-seniority workers.

### LABOR BRIEFS

A stock-purchase plan for employees is subject to collective bargaining, the Oil Workers International Union (CIO) contends in a dispute with the Richfield Oil Corp. of California. The company refuses to bargain on its plan (BW—Dec. 5 '53, p. 86). In a new turn in the case this week an NLRB hearing in Los Angeles was canceled; the matter will go directly to NLRB in Washington.

A no-union vote climaxed the latest attempt by AFL and CIO to organize American Enka Corp.'s Morristown, Tenn., mill—scene of a long and violent CIO strike in 1950. Along with the strike, CIO lost bargaining rights. AFL tried to win the mill last year, but lost 432 to no-union's 547. Last week NLRB announced that after a hot campaign no-union had won again, 581 to 397 votes for CIO and 68 for AFL.

Resignation of AFL's president, George Meany, as an adviser of the Foreign Operations Administration, announced last week, is a protest against what AFL calls FOA's "dismantled" labor program. The federation complains (1) "most of the key labor officers" of FOA here and abroad have been fired; and (2) FOA is failing to aid "free labor" organizations abroad.

Rail wage talks between carriers and the Order of Railway Conductors have stalled, according to an announcement made jointly by the parties this week. Disagreement is over demands for a graduated wage scale tying in with the weight of locomotives hauling the trains (BW—Sep. 26 '53, p. 176). The National Mediation Board has been called in and mediation is expected to start in Chicago on Jan. 11.

Union musicians are now about 60% unemployed (with 150,000 of 250,000 jobs) largely because of "canned music" and the government's 20% amusement tax, James C. Petrillo, head of the American Federation of Musicians (AFL), told an AFM conference last week. Petrillo said he will meet with Vice-President Richard Nixon on the latter's return from the Far East "to see what can be done about removing the tax."



OMEDAY . . . it will be for real!

Building with blocks is as much a part of a young boy's life as baseball will be in his teens. Blocks—one on top of the other—to satisfy the typically male urge to create.

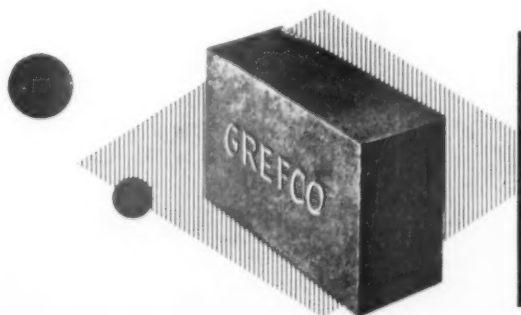
As the years roll by, this boy will go on to build bridges or buildings, to make his career in the laboratories of chemical research—or to watch steel being born from ore and earth.

Whatever his future, there will be refractory brick to help him do his job. Blocks of brick

to line the furnaces and heat containing vessels—in virtually every step of industry.

There would be no processed raw materials, no production, no living such as we know it but for refractory products which Grefco furnishes in quality and quantity to keep the nation on the move.

To the boy above, a very Merry Christmas and a great many Happy and Prosperous New Years. In his hands lies the future of America.



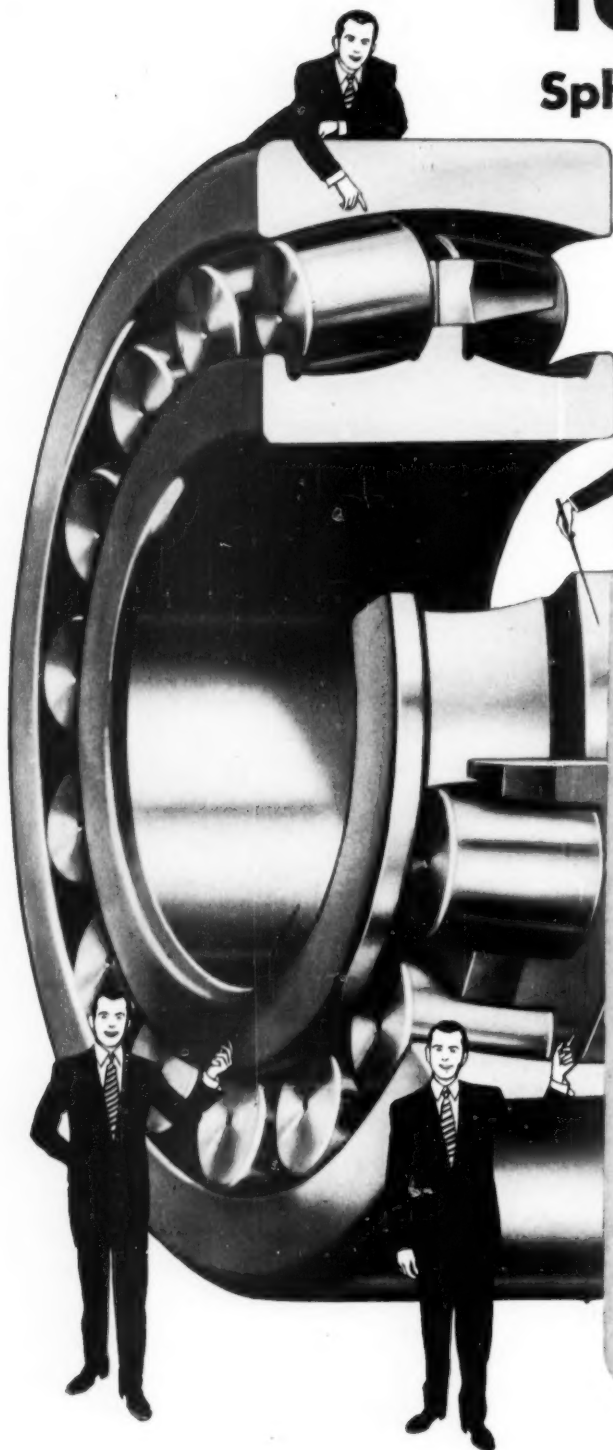
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*offer you these  
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- **Individual one-piece cast-bronze cage for each path of rollers**—to eliminate roller binding and assure freedom of operation.
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- **Available from stock with either straight or tapered bore**—for shaft or adapter mounting.

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# PERSONAL BUSINESS

BUSINESS WEEK

DEC. 19, 1953



You can expect—sooner or later—to hear an internal revenue agent knock on your door. When he does, cooperating with him will save you trouble.

The Treasury will make its door-to-door canvass of taxpayers permanent. Test checkups have been effective in catching up with delinquents. It's the best means yet found for tightening tax-collecting machinery.

The plan is to visit every taxpayer in the country. That will take time, of course—probably years.

Generally speaking, there's no reason to let the prospect of such a visit alarm you. The agent will ask only two things: (1) whether you filed a return; and (2) proof that you did. The latter can be either a copy of the return, or a canceled check.

What happens if you either fail to find such proof, or refuse to answer?

Very little, if anything—especially if you have filed returns regularly. Even if you haven't, the Treasury probably would seldom go to the full extent of its legal rights. But in an extreme case, here's what the law says it could do with a completely obstinate individual:

The Treasury will check its files to see if he has filed tax returns regularly. If he has, that ends it. But if he hasn't, he could be summoned to the tax office for an interview.

Refusal at this point can start to hurt—because Internal Revenue Service can force compliance by issuing either a collector's summons or a commissioner's summons.

The collector's summons is the toughest. Ignoring it can bring a fine of \$1,000, a year's jail sentence, or both. It takes a court order to enforce the commissioner's summons. But it could lead to contempt charges—and the same penalties of fine and jail.

Best move for a person who does not want to face a summons: Go to court and ask for the summons to be vacated. That way the person would avoid a contempt charge if his request were turned down.

Answering the summons won't affect a man's constitutional rights. Under the Fifth Amendment, he has the right to withhold information on (1) books and records in his custody; and (2) books in the custody of a bookkeeper or attorney authorized to hold them.

Note that the constitutional privilege won't cover books of a corporation, even if they contain incriminating evidence.

Remember, too, that in a federal tax examination, no accountant can claim privilege for information he learns in an audit. That applies even if a state law protects such information. The one possible exception: If the accountant is employed by a defense attorney, the attorney's privilege may extend to him.

There are some restrictions on what the tax collectors can take, too. Here are the three main ones:

- The statute of limitations can bar an examination. On ordinary returns, the limit is three years after filing. It's five years where there's been an

# PERSONAL BUSINESS (Continued)

**BUSINESS WEEK**

**DEC. 19, 1953**

omission of more than 25% of gross income. And in case of either failure to file a return and fraud, there is no limitation.

- **No one's books can be examined more than once for every tax year—**unless that person consents to more, or the commissioner notifies him in writing that another look is necessary.

- **The examination must be in a convenient place;** the tax people can't compel anyone to carry records an unreasonable distance. (But a recent tax case held that 45 miles is a reasonable distance.)

Remember that the canvass has the sole aim of making sure you have filed a return. Make it a practice to keep a copy of the return—or your canceled check—handy. It might save you a lot of headaches.

—•—

**Hunters weary of crowded domestic forests might consider big-game shooting in India.** From January through March, the Maharaja of Cooch Behar—an Indian state 300 miles north of Calcutta—will conduct a series of shooting expeditions in the state of Assam.

Chief game will be the Bengal tiger, hunted from the backs of elephants from the maharaja's stable. You can also hunt leopard, bear, wild pig, the rare Indian bison, and many species of birds.

India's hunting season is one of good weather—warm, clear days and cool nights. Big game is plentiful, the main camp and outlying jungle bungalows are comfortable and efficiently run. A special caste, the Mochi, are hired to skin animals you shoot.

There will be five separate hunts, of 10 days apiece. Each party will contain four shooters and four nonshooters. Price: \$3,000 for shooters with two guns each; \$750 for nonshooters. That includes meals, lodging, licenses, etc.; there is no tipping.

Camps will be run as they are for personal guests, with the maharaja's staff in attendance throughout—including his personal chef. Both European and Indian food will be available at all meals.

—•—

The Community Chest offers this Christmas-giving advice: **Don't prepare baskets for the poor.** That makes them feel uneasy in the glare of public charity, often hurts more than it helps.

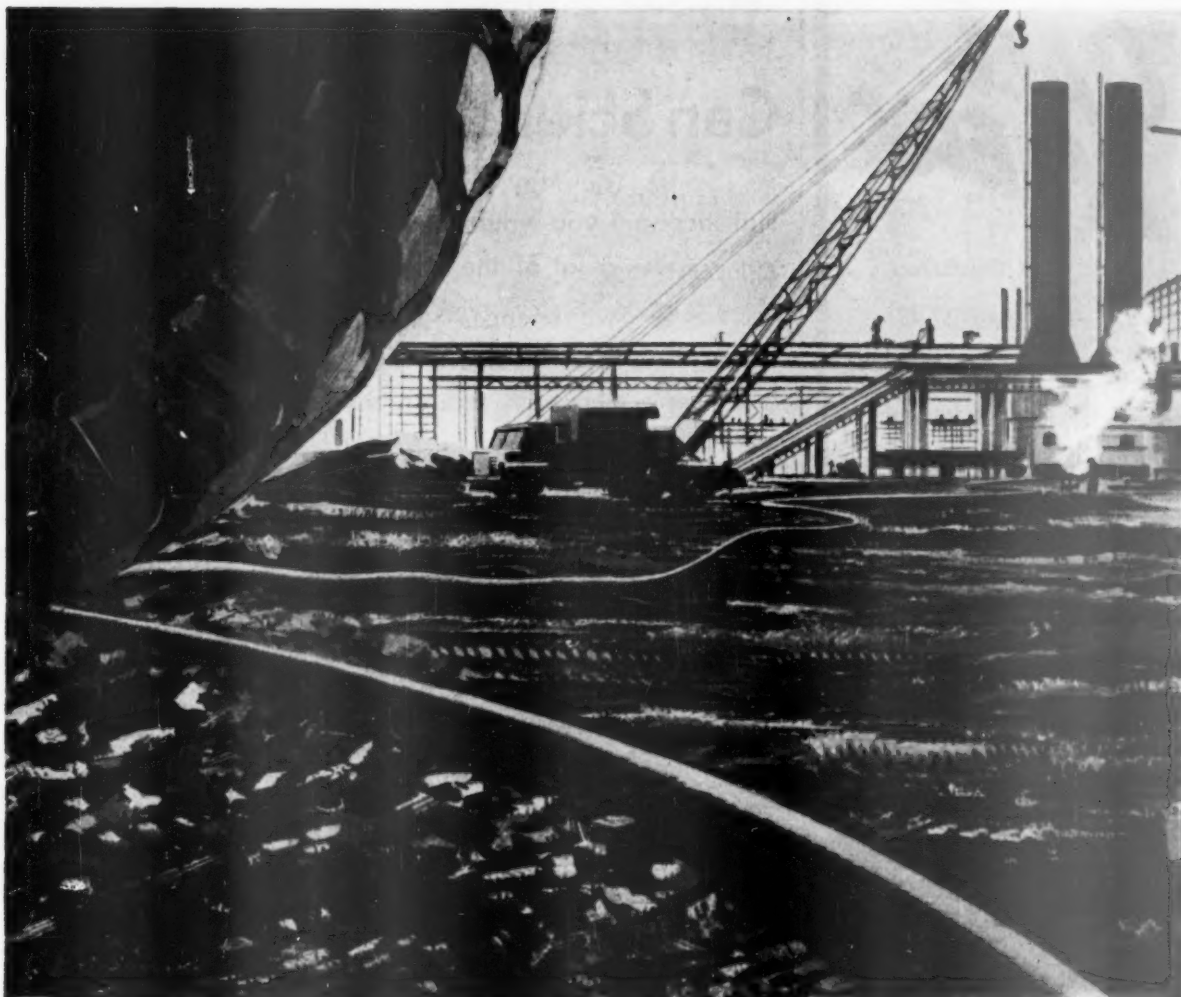
**Best bet is to give to your local Christmas Bureau, or special committee on Christmas giving.** These unite the social-service experts, assure wise distribution.

But be sure you give to legitimate societies. Charity rackets are so widespread that extra care is needed if you are to avoid throwing money away.

—•—

**Note for philatelists: Two new U.S. stamps will be out within the next month.** The first is a three-cent stamp to commemorate the 100th anniversary of the Gadsden Purchase. It will be released through the Tucson, Ariz., post office on Dec. 30.

The second is also a three-cent stamp. It's a commemorative of the 200th anniversary of Columbia University. It goes on sale Jan. 4, in New York.



## Meet the U. S. Rubber Hose they couldn't squash or cut!

On very rough terrain as well as hard, abrasive oyster-shell surfacing, 50-ton cranes on tractors, trucks carrying steel girders, steel pipe, reinforcing steel, or gravel, ran over U. S. Royal Cord Air Hose, day after day, in the 14 months it took to build an aluminum plant in Texas. No cribbing was ever used. Yet the hose at no time suffered damage, not even when run over while carrying 125 pounds pressure closed off at the end! Weathering and salt air had no effect on it. What's more, every foot of the hose is now being used in the finished plant.

If there ever was a hose you can thoroughly abuse, U. S. Royal Cord Air Hose is it. You don't have to waste time and money cribbing it. Move it about at will. It's the original cord hose built with true tire construction.

This is the sort of endurance you can count on in any United States Rubber Company product. For more complete information, get in touch with any of our numerous distributors or one of the twenty-five "U. S." District Sales Offices, each staffed with engineers to serve you. Or write to address below.

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"U. S." Production builds it  
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## Motor Repairman Finds Customers Ask For KLIXON Protectors

TROY, N. Y.: Kenneth C. Jolivet, president of the Tri-State Electric Motors, Inc., largest motor sales and repair shop in Northeastern New York State, is enthusiastic over the way KLIXON Inherent Overheat Protectors prevent motor burnouts.

"We handle many thousands of motor repair jobs every year. We've found Klixon Protectors prevent motor burnouts and keep our customers happy. In fact our customers are now beginning to demand Klixon protected motors."

The KLIXON Protector, illustrated, is built into the motor by the motor manufacturer. In such equipment as refrigerators, oil burners, washing machines, etc., they keep motors working by preventing burnouts. If you would like increased customer-preference, reduced service calls and minimized repairs and replacements, it will pay you well to ask for equipment with KLIXON Protectors.



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## RESEARCH

### Can Science Aid the Aged?

● You may not live so long as you thought the statistics said you would, but stepped-up research may help you bypass a lot of the infirmities of old age.

● Two sciences—geriatrics and gerontology—are broadening their studies to try to solve some of the problems connected with the process of aging.

● Researchers hope to find some way to synchronize the body so that one part doesn't wear out ahead of the rest.

Almost everyone these days knows that life expectancy is increasing. But the man who has been coasting along with the comforting impression that he can look forward to a lot longer life than his father or grandfather may be in for a rude jolt. Actually, his appointment with the Grim Reaper will probably come off pretty much on the old schedule.

The truth is, the average American man of 50 has an additional life expectancy of only three years more than his 50-year-old grandfather had more than 40 years ago. The reason for the seeming inconsistency in the statistics is that the total life expectancy figures—which show tremendous gains in recent years—reflect the drop in childbirth mortality and the better control of early childhood diseases. More and more babies are surviving to the age of 50. Once they've reached adulthood, however, science hasn't done much to stretch life beyond early-century expectations.

In 1910, for example, a 50-year-old man could expect to reach his 70th birthday, and a 65-year-old man could plan on his 76th birthday. Today, the 50-year-old can hope for only his 73rd, while the 65-year-old can look forward to celebrating his 78th birthday.

• **Stepchildren**—While medical research on cancer (BW—Nov. 7 '53, p143), heart disease, and similar killers has added a few years to the remaining life expectancy of older people, research on the aging process and research on the general infirmities of old age have generally been treated as stepchildren.

Now, however, two different sciences are working on the problems: (1) geriatrics, which is medical investigation of the diseases of old age; and (2) gerontology, the science of the aging process. The first, geriatrics, generally is limited

to the medical profession. Gerontology, however, also includes physiologists, biologists, and psychologists, and is concerned with what happens when the body ages, what changes take place when it starts to age, and what things affect the aging process.

• **More than Years**—One stumbling block to both groups is that the problems involved are about as complicated as the human anatomy itself. Both doctors and researchers agree that chronological years don't hold all the answers. Almost everyone has a friend who has reached 70 or 80—or even older—apparently without acquiring many of the characteristics typical of old age. There are others who suffer the infirmities of age while still young by chronological reckoning.

• **Scientists' Dream**—While laboratories have been working to find the answers to some of the aging process problems, scientists helping the aged have had to fly by the seat of their pants. Even though they don't have all the facts, they are doing all they can to help those who are growing old.

The gerontologists' main interest, however, is not adding years to man's life. This they would certainly like to do—if it can be done without just extending the breathing time of a cripple. But there are more important aspects of the work.

Heading the list is how to make life easier for the aged. Gerontologists would like to solve the problems presented by the infirmities that make older people crippled, physically weak, or mentally slow. Their hope is to synchronize all parts of the body so that, instead of having one part get old faster than the rest, the entire body will age at the same time.

• **Guinea Pigs**—Before this scientists' dream of making the body like the one

## NEW PATTERNS FOR PROFIT



### *Can Vacuum-Impregnation of Castings with Polyesters Eliminate Porosity and Enable Castings to Replace Costly Forgings?*

Sand castings, die castings and powdered metal parts can be permanently sealed against microporosity . . . with liquid polyester resins. Vacuum impregnation completely and permanently fills microvoids.

These impregnated castings have proved successful as valve casings handling hot oil, gas, and hydrocarbons; as jet aircraft fuel diffusers; hydraulic pump housings; and carburetors. Bronze castings have successfully held hydraulic pressures as high as 6000 psi without leaking . . . from sections that were known to be microporous.

The new liquid polyesters do not jell at room temperature, they are stabilized against inter-action with

copper, and they can be set to infusible solids—locked in the capillaries—with no exudation on the surface.

Polyester-sealed castings withstand high temperatures, resist corrosion and guarantee permanent pressure tightness. Vacuum impregnation corrects capillary defects, cuts down rejected castings. Polyester sealing prevents plating blisters and insures against surface finish failures.

Monsanto's customers supply these resins in viscosities that guarantee thorough wetting and penetration . . . can supply, in fact, the whole system of impregnation or will vacuum impregnate your castings on a service basis.

Monsanto is a major producer of **STYRENE MONOMER, MALEIC and PHTHALIC ANHYDRIDES** . . . basic chemicals used in the manufacture of polyester resins. For more information on how vacuum impregnation of castings with polyesters can serve you—write or call **MONSANTO CHEMICAL COMPANY, Texas Division, Texas City, Texas.**



SERVING INDUSTRY...WHICH SERVES MANKIND



## Portland's power demand up 70% since 1945

In the shadow of Mt. Hood, at the western entrance to the water-level route through the Cascade Mountains, stands Portland, Oregon. It has been a real estate man's dream for years.

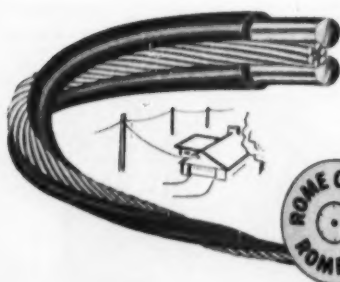
Population of the metropolitan area has increased 40% since 1940. Growth of commerce and industry has been riding high on the rapid development of lumber and wood processing, pulp, paper, food products, woolen goods, aluminum, chemicals and alloy metals.

To meet rising electrical needs, Pacific Power & Light Company and Portland General Electric Company invested more than \$130,000,000 in new facilities to serve their customers.

In September, 1953, PP&L completed the 125,000 kw Yale hydroelectric dam—the second step in the development of the 500,000 kw power potential in the Lewis River, 40 miles north of Portland.

With all this growth, Rome wire and cable are in wide demand to link up expanding power facilities. Whether for heavy power loads or ordinary house current, all Rome products are held to rigid quality standards that safeguard the heavy investments in machinery and appliances.

Through its reputation for quality, Rome Cable quickly became a top producer in this highly competitive field. That's why you will be interested in "The Story of Rome Cable," yours for the asking.



Rome Aluminum Triplex Secondary and Service Drop Cable is in great demand for new residential developments. Because it requires fewer poles, it's neater and less costly to install.



**ROME CABLE**  
*Corporation*  
ROME, NEW YORK  
TORRANCE, CALIFORNIA

horse shay that fell apart all at once comes true, researchers will have to get more data on people during the aging process. One of the unfortunate facts of American medical history is that nearly all the groups open for regular checks and used for compiling medical information are either young or already sick. For example, excellent medical statistics and information can be had from military records, but all these men are in younger age categories. Also, experimental medical tests are frequently made among medical or other students, also in this younger grouping.

Hospital records are very complete, but they're records of people who are already sick. This doesn't give much information on average people.

Dr. Nathan W. Shock, chief of the section on gerontology of the National Heart Institute and the Baltimore City Hospitals, is a little better off. For his experiments and research he has access to the patients of the Baltimore City infirmary for the aged. Many in this group are healthy, but are there because of some social-economic problem.

In Minnesota a group of businessmen are cooperating with a research project that may turn up the best results yet. These businessmen volunteered to have periodic physical examinations and tests. The data from these checks are being gathered to form a statistical file on changes in an average group. But here again, it's a specialized group.

• **New Problems**—While the researchers feel that they've learned a few answers to the aging problem, they've also come up with a lot of new questions. For example, they found that often a mouse will live longer on a starvation diet. The question, of course, is: Is it worth it? Even more important, mice living on such a diet become sterile.

• **No Jackpot**—It's pretty hard to figure how much research is being done on geriatrics and gerontology. It all depends on how you define your terms. Some doctors, such as Dr. Freddy Homburger of Tufts College, believe that cancer and geriatrics are so inter-related that work on cancer is research on geriatrics. Similar views are held by some doctors working on heart diseases and arthritis. Other doctors eliminate these research areas from consideration in the research on aging.

Eliminating the research on these related diseases brings to nearly nothing the amount of money earmarked for gerontology. Research grants approved by the U.S. Public Health Service in June, 1952, totaled more than \$11-million. More than 1,000 grants were included. In the strict field of gerontology there were only 12 grants for a total of about \$145,000, slightly more than 1% of the money.

• **More Needed**—One of the chief reasons for this sad state is that few groups,



LOW VELOCITY ROCKWOOD WaterFOG is here discharged from a Rockwood 12-foot applicator.

## Fog keeps men cool under fire

Getting close to a fire is not nearly as hazardous as it used to be—thanks to Rockwood WaterFOG.

Fire fighters find they can approach a blaze in greater safety—and greater comfort—when WaterFOG is on the job. It not only controls flames quickly, it cools the area, too, providing a protective "cover" for fire fighters.

You, too, can benefit from its speedy, cooling, fire extinguishing action. A new Rockwood WaterFOG Sprinkler Head has recently been developed that brings automatic WaterFOG to all types of buildings.

The new head discharges WaterFOG from conventional sprinkler systems thus making WaterFOG available for far more applications than ever before possible. It is a result of years of research by Rockwood engineers working closely with engineers in the U. S. Navy, municipal fire departments and industry. Covering approximately 30% more area than ordinary heads, it requires fewer heads per installation. And each head uses less water.

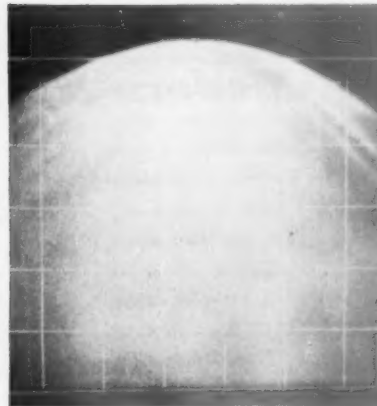
For complete details on this remarkable Rockwood Sprinkler Head, please send today coupon at right.

## ROCKWOOD SPRINKLER COMPANY



Engineers Water . . . to Cut Fire Losses

### How Rockwood Engineers Water to Cut Fire Losses



**NEW ROCKWOOD WaterFOG SPRINKLER HEAD** breaks up water into millions of particles that burst into a blanketing mist of steam, smothering the fire. Note how fog is discharged into flame space. Ceiling goes unharmed.



**READ HOW ROCKWOOD WaterFOG** cools temperatures, blankets nearby inflammables, chokes off flames. Get this new, illustrated booklet and learn the many reasons why fire fighters recommend WaterFOG for efficient and economic protection.

#### SEND FOR THIS INFORMATIVE BOOKLET

**ROCKWOOD SPRINKLER COMPANY**  
112 Harlow Street  
Worcester 5, Mass.

Please send me your illustrated booklet on WaterFOG Sprinkler Fire Protection.

Name.....

Title.....

Company.....

Street.....

City.....Zone.....State.....

# M. & St. L.

## Modern & Stream Lined

The Minneapolis & St. Louis in 1953 is a completely modern Railway, staffed and equipped for its specialized job:

### Fast Freight Service in the Great Midwest

Under the present management, the M. & St. L. has been rebuilt, physically and financially, in the past 18 years.

### SOME FACTS ABOUT THE M. & ST. L.

**Locomotives:** all the new and more efficient Diesels, 73 units.

**Freight Cars:** 4,000, nearly all new since 1944.

**New Depots, Shops and Bridges:** scores of old structures replaced.

**Major Projects:** new general office in Minneapolis and three Diesel service buildings.

**Yards and Shops:** rebuilt and modernized at Minneapolis, Marshalltown and other terminals.

**All Improvements:** paid for or being paid for from earnings.

The M. & St. L. is one of the few railroads without bonded debt. Only capital is 600,000 shares of common stock.

Since 1935, operating revenue has tripled, totaling \$22,901,000 in 1952.

Employees number about 2,800. Total payroll, \$11,403,000 in 1952, nearly three times that of 1935.

Taxes totaled \$2,861,000 in 1952, paid to federal, state and local governments, equal to \$4.77 per share of stock.

The M. & St. L. operates 1,397 miles of main track: 399 in Minnesota; 155 in South Dakota; 753 in Iowa and 89 in Illinois. Serves 225 cities and towns.

Constant program of industrial development has located several hundred new industries on M. & St. L. lines, creating additional freight traffic.

Traffic department, strongly staffed and operating 36 offices throughout the U. S., works aggressively to secure freight, including "bridge line" traffic from connecting roads as well as shipments to and from points on line.

### THE GOAL OF THE M. & ST. L.

To provide ever-better Freight Service to the Communities it serves, to Agriculture, Business and Industry and to Connecting Railroads; thus contributing to Progress and Prosperity of its Midwest Territory, expanding its own Traffic and Revenues and making possible the payment of Liberal Dividends to Owners of its Stock.



The **MINNEAPOLIS & ST. LOUIS** Railway

Modern & Stream Lined Freight Service



even governments, can assure support for the long-range programs needed. Dr. Shock would like to take a group of average people in Baltimore and keep accurate checks on their health and aging changes from about 30 years old—believed to be about the average age for the beginning of the aging process. The problem here is to get the money to support the 10- to 20-year program.

William S. Merrell Co., a pharmaceutical firm, has taken upon itself to supply part of the research need. It announced recently that it would build a \$2-million gerontological laboratory. Purpose: to study the aging process, such as the causes for hardening of the arteries.

## Two Road Shows Tell Story of Atom

The American Museum of Atomic Energy at Oak Ridge, Tenn., is making up its 1954 schedules for nuclear exhibits provided for conventions and trade association groups. The museum, sponsored by the nonprofit Oak Ridge Institute of Nuclear Studies, has two major traveling exhibits that are hauled around the country in large tractor-trailers.

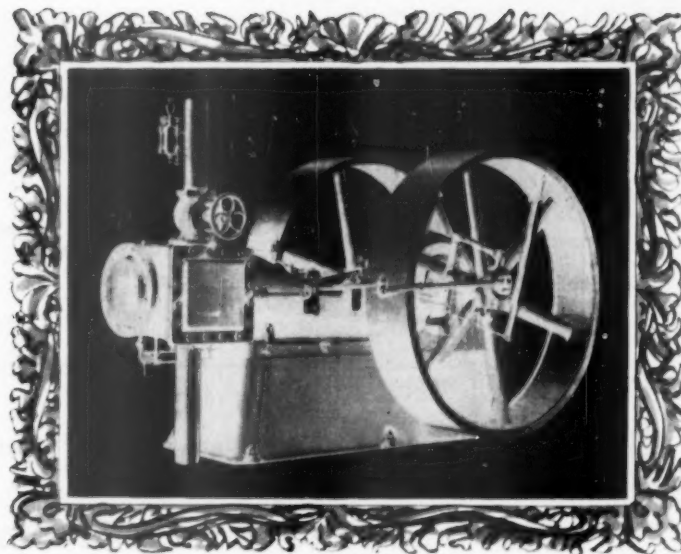
One exhibit is designed for major commercial showings, such as at state fairs. It covers about 7,500 sq. ft. of display space. A smaller version, using about 4,000 sq. ft., can also be fitted out.

• **Real Uranium**—The central exhibit in the traveling shows is a 10-ft.-high model of the Oak Ridge uranium-graphite reactor. It contains real uranium-235 and irradiates coins that become souvenirs for the owners. Guides demonstrate how the reactor is fueled, how material is inserted for irradiation, and provide information on how the reactor is controlled.

The organization that sponsors a showing at a fair pays all transportation and other expenses connected with the display, as well as a daily fee during the exhibition. Oak Ridge points out, however, that schedules are arranged to keep costs at a minimum.

• **Permanent Display**—At Oak Ridge, the permanent American Museum tells the story of atomic energy from the ore mine to the production of radioisotopes and power from the nuclear reactor. A 250,000-volt Van de Graaf generator, a museum-size atom smasher, is included in the exhibits. It stands a visitor's hair on end, enables him to light a fluorescent tube simply by grasping the tube, and produces artificial lightning.

Other sections of the museum show the uses of radioisotopes in industry, agriculture, and medicine.



*There was quite a stir in town that day, forty years ago, when they installed Jennie in the brass factory. She made awesome noise, and delivered awesome power. Well, they carried her back down the hill the other day . . . in the back of the same truck that delivered a piston for the new engine. Jennie's day was a good one, but it's done.*

## ***Jennie doesn't live here anymore***

All over industrial America the power-picture is changing. Forty years ago each worker had only 3 horsepower behind him. Today the average power-per-worker is close to 8½ horses.

And, as most management-men know, the remarkable thing about power is that it gets cheaper all the time. Rather, it does if you keep your power equipment modern.

Does Jennie live at your plant any more? Are you putting as much power behind your men as you can? Is your fuel bill higher than it ought to be?

There are probably several men near at hand to you who know. One is your power engineer. Another is the nearby consulting engineer who makes power, in all its forms, his specialty.

These men may have lots of good advice for you. They create power, they transport it and transform it (from steam, say, to air conditioning) and use its magic to breathe life into your business. They know equipment and they know efficiency.

So don't take your power for granted. Find out which new equipment will pay for itself. Make sure your power-picture is constantly changing. It ought to!



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primary industrial media  
and a member of  
the Audit Bureau  
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**MCGRAW-HILL . . . ABP**

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—for industry and agriculture

FMC's qualified organization is constantly translating new product ideas into commercial equipment for industry and agriculture.

If you have a new development or product idea that might find application in one of the following fields — agriculture, food preparation and processing, packaging, automotive servicing, power gardening, and pumping equipment — we are interested.

*Unpatented ideas must be submitted on our disclosure agreement form, available on request. We are not responsible for unsolicited material.*

For full information on how FMC successfully puts ideas to work and how you may submit your own new development or product ideas for consideration, write for special brochure B-1152.

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AND CHEMICAL  
CORPORATION**  
Organization Planning Dept.  
P. O. Box 760  
San Jose 6, California

## TO A MANUFACTURER OF COSMETICS Who Wants to do Business in Western Germany

As one of the leading firms in Western Germany with facilities for distributing and manufacturing cosmetic products, we are now prepared to represent a limited number of American companies who are seriously interested in developing a volume business in the prosperous West-German market.

Currently, we are German representatives for firms in both North America and Great Britain.

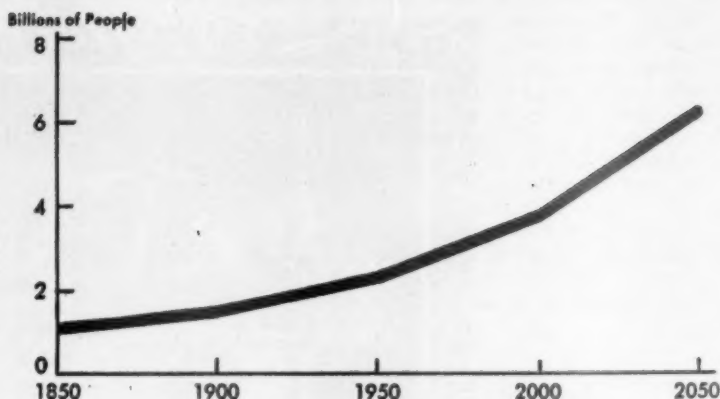
Whether you require a manufacturing or distributing service (or both), we are thoroughly equipped to meet your needs. Because of our large organization and long experience, we work at maximum speed and minimum cost.

We are interested in representing only companies that intend to develop a large business in Western Germany and who are prepared to back their products with enough advertising to assure success. We employ one of the leading advertising agencies in Germany.

All correspondence is carried out in English. If you are interested, please communicate with:

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SPEZIALPRÄPARATE**  
Berlin SO 36  
Kohlfurter Strasse 41-43

## World's Population



The world's population may almost triple by the year 2050 . . .

## So here's how the world's total energy needs

Total needs  
1950—2050

Of this, world reserves  
of fossil fuel — coal, oil,  
gas and oil shale — might  
furnish as much as

Income energy — from sun,  
wind and water — should furnish

Needed from atoms

Estimated by Palmer Putnam in "ENERGY IN THE FUTURE"

## Soon the World Will Need

### Where the world gets its energy now . . .

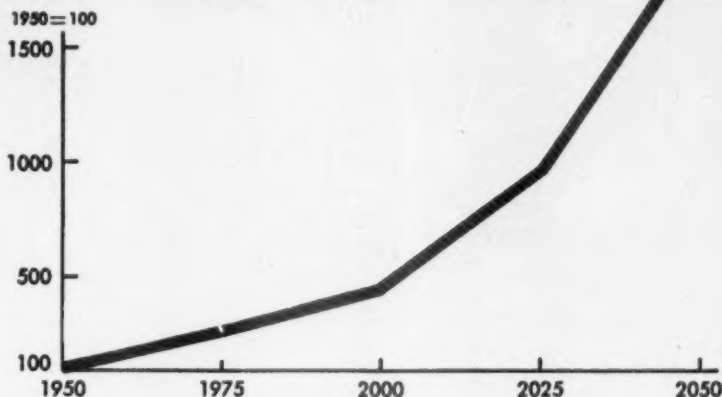
Income energy	23%
Fossil fuels	77
Atom	—
	<hr/>
	100%

In the next 100 years, the world's population may grow from 2.4-billion to 6-billion—or even 7-billion. At the more conservative estimate, the world in 2050 A.D. would burn energy 20 times as fast as it does today (charts). And from now to 2050, it would use up five times as much energy as it has consumed in all of history.

The gap between the world's energy needs 100 years from now and its potential energy supply can be made up only by calling on atomic power.

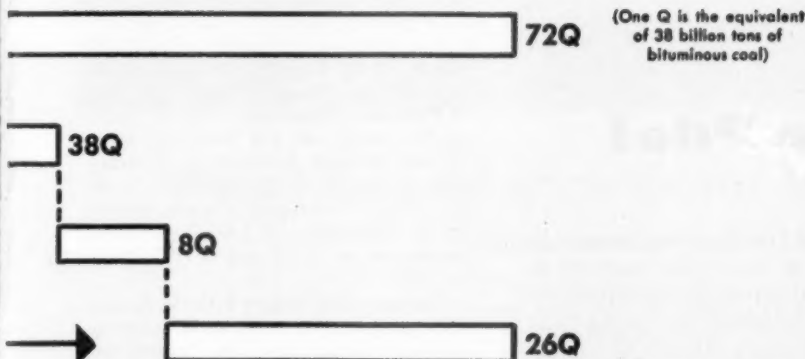
These conclusions are drawn by Palmer Putnam, a consulting engineer, in a report to the Atomic Energy Commission. The report has just been published

## World's Consumption of Energy



... But its energy requirements are likely to multiply 20 times

in the next hundred years can be met



©BUSINESS WEEK

## the Atom for Energy

in book form, *Energy in the Future*, by D. Van Nostrand Co., Inc., of New York.

• **The Energy Gap**—Putnam studied the fossil fuels—coal, oil, gas, and oil shale—and counted up the energy that would be recoverable from them even at twice today's prices. His finding: Fossil fuels could supply only a little more than half of the total energy requirements of 2050 A.D.

Putnam then looked at the continuing sources of energy: water power, solar energy, wind power, fuel wood. These might make up another 10% of the needs in 2050.

To fill the big gap, the rest would

Where it will get its energy in 2050...

Income energy	15%
Fossil fuels	25
Atom	60
	<hr/> 100%

## No noise is Good News!



...it's the chair

with the

### Fiber Glass Base

Sturgis steel chairs have joined the anti-noise crusade in offices... with fiber glass bases that are quite noiseless in motion over the roughest floors. Makes a Sturgis chair a sound investment, especially when you remember that a fiber glass base just can't be harmed by office abuse, never looks shabby, never needs refinishing. Gray, green, walnut or black, on 8 executive and stenographic models.

### Engineered for Long Life and Minimum Maintenance

**Nylon Thrust Bearing:** takes a lifetime of swiveling.

**Ball Burnished Spindle Bearing:** perfect fit for long life.

**Self-lubricating Castor:** oversize ball bearings, extra wide rubber wheels.

**STURLON® Finish On Metal Parts:** 10 to 20 times as abrasion-resistant as other finishes.



### POSTURE CHAIRS

The Sturgis Posture Chair Company, Sturgis, Michigan  
Plants in Sturgis, Michigan and Charleston, S. Carolina

**THE STURGIS POSTURE CHAIR COMPANY**  
General Sales Offices, 154 E. Erie St., Chicago 11, Illinois

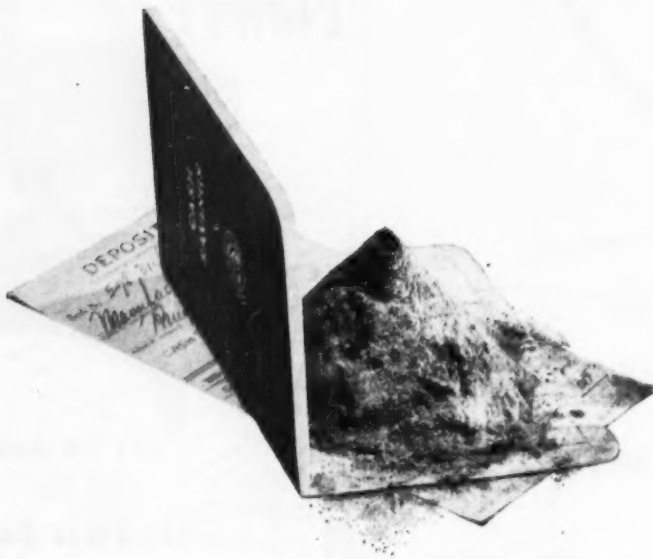
We'd like a copy of your illustrated folder on chairs with fiber glass bases.

Name

Firm Name

Address

City  State



## How to Make a Pile!

Buell Engineers are helping many of America's Leading Corporations to stack away a tidy sum every single month.

How? Through the efficient recovery of the valuable dusts that normally pass out of factory smoke stacks.

In one installation alone, Buell equipment regularly recovers over 50 tons of this valuable dust *every day*. So, you can see that substantial savings are involved.

What's more, Buell engineers *can forecast* the rate of dust recovery in advance thus putting your investment in Buell equipment on a paying basis from the outset. There's no obligation! No guess work!

We will be glad to supply the names of present users of Buell equipment right in your own field and urge your complete investigation.

Our informative brochure—*The Collection and Recovery of Industrial Dusts*—explains *all three* Buell systems of industrial dust collection. Get your copy today. Write Dept. 30-L, Buell Engineering Company, 75 Pine Street, New York 5, N. Y.

# buell®



20 Years of Engineered Efficiency in  
**DUST COLLECTION SYSTEMS**

**"... 2.7-billion population by 2000 and 6.3-billion by 2050 ..."**

ENERGY starts on p. 180

have to come, probably, from nuclear fuels.

• **It Could Happen**—In his report, Putnam is careful not to present his calculations as a confident prediction of things to come—it's just an indication of what could happen.

AEC decided four or five years ago to try to gauge the long-range role of peaceful atomic power. The commission asked Putnam to study the world's probable maximum demands for energy 50 and 100 years from now.

Putnam figured he could get the answer by picturing for the years 2000 and 2050 these three factors: (1) a maximum estimate of population burning fuels (2) for maximum requirements at (3) minimum reasonable efficiencies. Aside from the efficiency factor, he had two main questions to answer:

• What is the maximum population to be expected in 2000 A.D. and 2050 A.D.?

• What might be the energy demands of these populations, based on current trends in energy use?

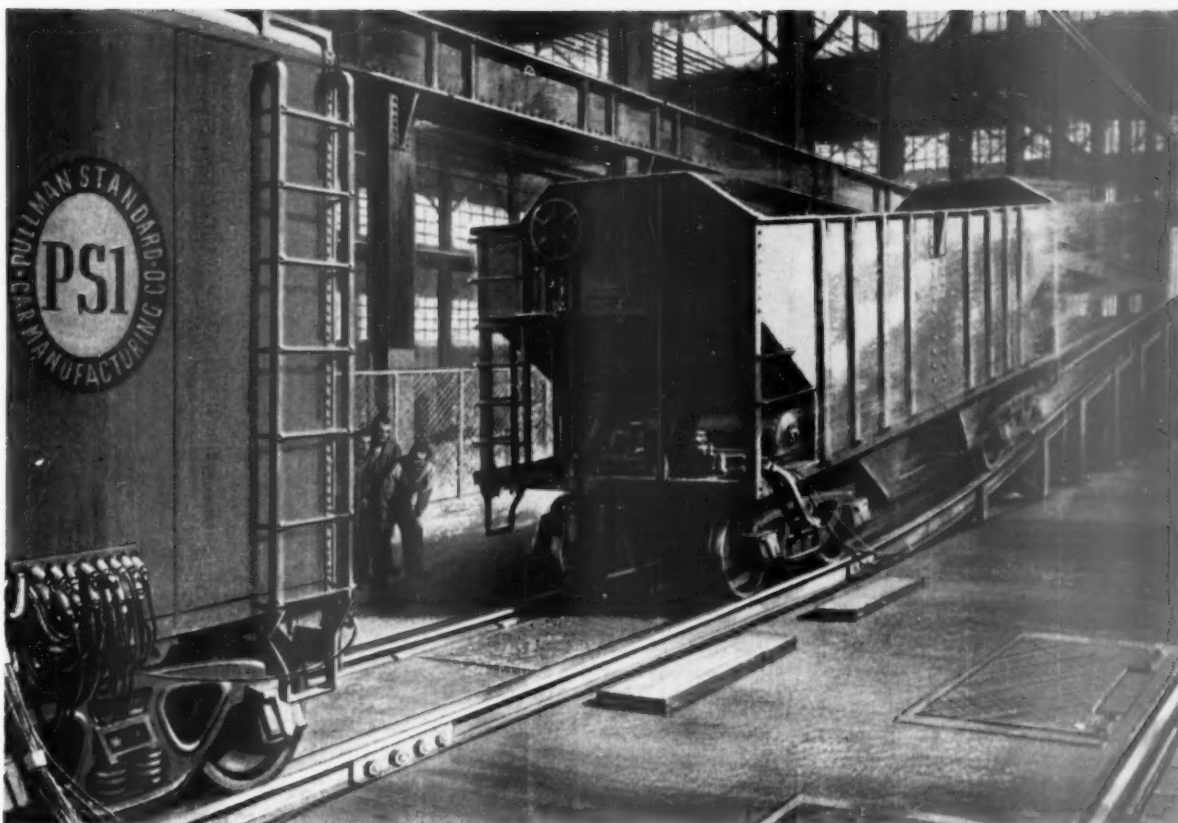
• **Potential Population**—Figures cited in the charts are not Putnam's most extreme findings. For example, by using a purely mathematical approach based on accepted techniques, Putnam arrived at an expectation of 3.9-billion world population by 2000 and of 7.2-billion by 2050.

Putnam wasn't happy with the figures from straight arithmetic, so he adopted another approach, too. He divided the world into six population groups, according to extent of literacy and urbanization, and figured the probable population increase for each of the six groups. When he added up these figures, he had estimates of 2.7-billion population by 2000 and 6.3-billion by 2050. These are the figures used in the charts (pages 180, 181).

Putnam's report offers both sets of figures. He doesn't say that one is right and the other is wrong. All his related calculations are based on this possible wide variation in the predictable maximum for population.

• **Potential Energy Demands**—Firm predictions of energy demands proved to be as impossible as forecasts of precisely what the population might be. However, Putnam found that the rate of increase in energy consumption has been pretty steady in recent years: about 3% per year. At that rate, he figures, in 2050 the world will be burning energy at 20 times today's rate (chart).

Putnam points out that you can

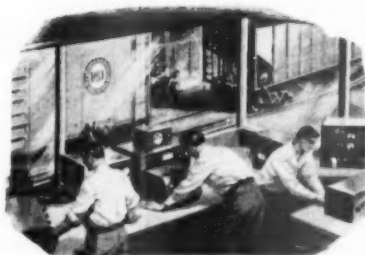


## What has science done for BOX CARS?

### Made them Stronger, Longer-Lived, More Economical

The resounding crash of two fully loaded freight cars smashing into each other is familiar to Pullman-Standard Research & Development engineers. This is just one of the many tests being made continually to *improve the standardized PS-1 box car*. This is one reason why 50,000 PS-1s on 56 railroads can "take it" ... why they are setting economical, day-after-day operating records.

Pullman-Standard experts reproduce jolting service conditions even more rigorous than cars would ever encounter. This shock treatment and other punishing tests prove the soundness of PS-1 design and construction even before the cars go on the line. This is why Pullman-Standard-built freight cars *stay in service longer* and assure railroads of *more time for revenue-producing shipments*. And the cost is lower than cars built to individual specifications because mass production techniques have been applied to freight car production to fulfill the needs of America's railroads for a quality box car.



*Recording the evidence to improve the PS-1.*

*Write for free booklet describing this and other standardized freight cars.*

WORLD'S LARGEST BUILDER OF FREIGHT AND PASSENGER CARS

# PULLMAN-STANDARD

CAR MANUFACTURING COMPANY

SUBSIDIARY OF PULLMAN INCORPORATED

79 EAST ADAM'S STREET, CHICAGO 3, ILLINOIS

BIRMINGHAM, PITTSBURGH, NEW YORK, SAN FRANCISCO, WASHINGTON



## how to get a 10-day head start on your competition

When a prospect reads your advertisement and decides that your product might do a job for him, the chances are he is going to want more information, fast.

But if he's that interested, he's pretty sure to read your competitors' ads, too.

### So how can you get a head start in the race to the dotted line?

Here's how: any time this interested prospect has to send for product information, he's going to have to wait about 10 days to get it. But if you can refer him immediately to printed product information that you have already anchored in his own office in a way that makes it easy for him to put his hands on it... you get a 10-day head start on every competitor who makes him wait.

Just two simple steps will give you this competitive advantage: first, place your product information where it is *instantly accessible* to all your best prospects; second, be sure every advertisement or mailer re-

minds every prospect that additional information is right there, in his office.

### You can measure the importance of catalogs in getting orders

The National Industrial Advertisers Association's "Survey of Industrial Buying Practices" revealed that, with 60.1% of the 1,383 makes considered, printed product information controlled a supplier's chances of getting the order.

The Sales Executives Club of New York found, in a recent survey of industrial sales costs, that the estimated cost of producing an order drops from an average of \$187.39 on cold calls to \$44.89 on calls made after a prospect has studied a supplier's catalog and invited his salesman to call.

If you'd like more information about these independent studies, there's a Sweet's district manager near you... ready to hop over with full details.

**"The easier you make it for people to buy your products, the easier they are to sell!"**



**SWEET'S CATALOG SERVICE** • Division of F. W. Dodge Corporation • 119 West 40th Street, N. Y. 18, N. Y.  
Designers, producers and distributors of manufacturers' catalogs for the industrial and construction markets.



## 2 great new **ELECTRIC** **AUTOETTE Pickup Trucks**

Ideal for all types of light hauling in industrial plants... warehouses... resort hotels... movie lots... golf courses and ranches. Powerful. Dependable. Economical.

Costs only 3 cents a day for 12 hours of hauling — 30 miles of travel. Less than a dollar a month... \$10.00 a year... 1/5 cent per ton-mile!

Write for complete information and name of nearest AUTOETTE Dealer.

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## 4,000,000 PER DAY

**MOST MODERN LABEL PLANT IN AMERICA**  
Complete air conditioning and high speed, automatic equipment give us the edge—**BETTER** quality, **FASTER** delivery and **ATTRACTIVE** price on practically any flat paper label. Send your specifications for our proposal.  
**KALAMAZOO LABEL CO., 301 W. Ransom, Kalamazoo, Mich.**

make a case for an even greater increase, say 4% or even 5% a year. Then the world's energy requirements would go up into incomparably vaster dimensions, and the chart on pages 180 and 181 wouldn't begin to tell the story.

Up to 1950, the world had consumed 13Q of energy (Q is a symbol of quantity equivalent to 1-billion-billion Btu., or about 38-billion tons of bituminous coal). At the 3%-a-year rate of increase, worldwide use would account for 72Q in the next 100 years. At a 4%-a-year increase, however, consumption in the next century would be 187Q, and at a 5% rate of increase it would be 487Q. At this higher rate, the world would use nearly 40 times as much energy in the next century as in all of history up to 1950.

• **Supply Shortfall**—Even at a conservative forecast of 6.3-billion world population and a 3%-a-year increase in energy demand, traditional sources wouldn't come close to filling the next century's energy needs.

"There is more coal, oil, and gas in the earth's crust than will ever be used," says Putnam. But he points out that the amount that can be recovered economically limits the ability of these fuels to fill the foreseeable demand.

Coal, the most plentiful of the fossil fuels, can't be expected to provide more than 32Q of energy, even at twice the 1950 market price. Oil and gas (at 1.3 times the 1950 price) and oil shale might supply another 6Q. Depletion of all the economically obtainable fossil fuels would then have produced 38Q, not much more than half the 72Q that may be needed.

Continuing sources of energy might add another 8Q, Putnam thinks. To make up this total, during the coming century we might get 5Q from solar heat collectors, 1.5Q from fuel wood, 1Q from farm wastes, and 0.5Q from wind and waterpower.

• **Plugging the Gap**—After tapping all these sources of energy, Putnam sees the world with a shortage of 26Q. This is the gap that he thinks should be filled by atomic energy.

As early as 1947, nuclear fuels were technically capable of supplying 10% to 20% of energy needs of the U. S. Today, atomic energy can be used to generate power to compete favorably at a price double that of coal. The raw materials are abundant: Putnam says known reserves of uranium and thorium could provide 575Q—nearly eight times the total estimated need for the next 100 years.

Therefore, Putnam concludes, "the nation's talents, public and private, should be released for the development of nuclear furnaces (reactors) capable of furnishing heat for the generation of electricity, for district central heating, and for industrial process heating."

# WHAT EVERY INVESTOR SHOULD KNOW

There is one thing that bankers, top management men and financially-minded executives should know more about . . . and that's the function of business magazine advertising and its contribution to investment values and net profit.

It's common knowledge that the increased cost of materials and labor . . . plus taxes and pension funds, etc., have pushed the break-even point to an all-time high. This means that today a company may not begin to realize a profit until it operates at better than 75% of capacity production . . . and that unless full production (and the sales to support such production) are maintained, the company and its investors may not realize a profit on their investment.

Obviously you can't make a profit until you make a sale. To maintain sales, a company must have markets . . . and those markets must be developed and protected against competition. And that's the function of Business Publication Advertising. For well directed and carefully executed business magazine ad-

vertising develops company recognition and product acceptance . . . reaches known and unknown buying influences . . . builds sales and makes salesmen's time more productive.

THAT'S WHY WE SUGGEST: *If you have a financial interest or responsibility in a company, always check to see that the company's management is using adequate Business Publication Advertising to protect and expand its market position.*

★ ★ ★

A new McGraw-Hill booklet—"Tell 'Em How Your Product Raises Productivity...Cuts Costs—" discusses the trends in selling motives and marketing objectives. We will be happy to send you a copy without cost or obligation. Send your request to Company Promotion Department.



McGRAW-HILL PUBLISHING COMPANY, Inc.



330 WEST 42nd STREET, NEW YORK 36, N. Y.



H E A D Q U A R T E R S F O R B U S I N E S S I N F O R M A T I O N

# clues:

## TO THE SOLUTION OF

### MANAGEMENT MEN'S PROBLEMS.

Published every week—closes 12 days in advance. Rate—\$5.00 per line (\$2.50 per line for positions wanted ads), minimum 2 lines. Allow 5 average words as line; count 2 words for box number. Write for special rates for Business Services advertisements. Address box number replies c/o BUSINESS WEEK to the office nearest you. NEW YORK, 330 W. 42nd St., CHICAGO, 520 N. Michigan Ave., SAN FRANCISCO, 68 Post St.

#### EMPLOYMENT

##### Positions Vacant

**Area Accountant, permanent position for a man** with heavy experience in customer accounting in the utility industry. Good educational background in accounting required; college degree desirable. We are a natural gas utility company engaged in production, transmission and distribution in four states. We offer a full program of employee benefits. Apply by mail to: Southern Union Gas Company Burt Building, Dallas, Texas. Attention: Mrs. Singer.

**Mechanical Engineers permanent positions** for design, research and development work on solid propellant rockets and allied projects. Sound fundamental background in mechanical engineering required, plus initiative and ingenuity. Positions available for Project Engineers, Assistant Project Engineers and Junior Engineers. Interview and relocate at company expense. Salary open. Write: Personnel Department, Thiokol Chemical Corporation, Redstone Division, Huntsville, Alabama.

##### Selling Opportunity Offered

**Opportunity for Aggressive Distributors** now contacting industrial accounts. Leading manufacturer of Rust Preventative Coatings has exclusive territories available. Our representative will assist your organization in selling our line of Rust Preventative and Chemical Resisting Coatings. Write now for full details regarding this profitable franchise. Rust-Bela Company, 5508C Meach Ave., Cleveland 5, Ohio.

##### Positions Wanted

**Controller wants challenging position** with smaller firm in growth industry. Diversified administrative experience at top management level qualifies him to relieve president of business management and operational details. New England preferred. PW-1075, Business Week.

**Business Engineering Opportunity Desired.** Graduate accountant. Age 32. Six year's management experience. Efficiency and procedures enthusiast with ability to deal with people. PW-1082, Business Week.

**Tax Accountant, imaginative resourceful tax** accountant with history of tax savings seeks change in positions. Experience—one year as Internal Revenue Agent, three years tax senior with top C.P.A. firm, four years with international manufacturing corporation. Education—Masters degree in accounting. PW-1031, Business Week.

##### Selling Opportunities Wanted

**Western Canada Agent for "Nesco, Inc."** "Counselor Bathroom Scales" and "Radio Coaster Wagons". wants one additional major houseware, and Toy line with \$100,000 volume potential. Write: H. Douglas Latta, 388 Donald Street, Winnipeg, Canada.

**Mfgs. Rep. seeks bearings & industrial lines.** Long established engineering sales contacts throughout New England and metropolitan New York. RA-1084, Business Week.

**International Department Expertly staffed long** established firm interested in Machinery, Industrial Equipment for exclusive world or territorial representation. Charles Hardy, Inc., 420 Lexington Ave., New York 17, N. Y.

**We are a result producing sales engineering** agency covering New England for manufacturers of quality machinery and equipment. Are you in need of such representation? We seek an additional line of real merit. RA-1056, Business Week.

**Aggressive Mfg. Representative covering South-** east, Delaware through Mississippi. Interested in additional electronic and electro-mechanical lines. RA-1051, Business Week.

**Can devote one-third time as representative of** business firm or as secretary/treasurer of trade association. Former executive in chemical industry with broad background. Office in Times Square area, New York City. Rent and general office expenses to be shared with two long established trade associations. RA-1090, Business Week.

**Midwest embryo salesman, 29, offers hard work** in exchange for opportunity. Was advertising copywriter, now selling office machines. SA-1091, Business Week.

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## RESEARCH BRIEFS

Facts belie the commonly held opinion that American business executives die early, according to Dr. Harry E. Ungerleider, director of medical research of the Equitable Life Assurance Society. Individuals carrying large policies, believed to represent the executive group, fare no worse than others, Dr. Ungerleider pointed out in a speech at the midyear meeting of the American Pharmaceutical Manufacturers' Assn.

The world's leading geomagnetic observatory, now located at Cheltenham, Md., will soon move to a new location near Fredericksburg, Va. According to Captain E. B. Roberts, chief of the Division of Geophysics, Coast and Geodetic Survey, "The station in Virginia will be used for standardizing magnetic instruments throughout the nation and those sent us by foreign countries for comparison." The move will permit expansion of research and development facilities for instruments for study of the earth's magnetic field.

First unit of a major facility for testing aircraft engines at simulated altitudes of 15 mi. or more has been completed at Tullahoma, Tenn., and turned over to the Arnold Engineering Development Center of the U.S. Air Force. The equipment will be ready for tests by January, the Air Force announced.

Cosmic rays, mysterious charged particles bombarding the earth, may come from any one of three sources, scientists decided at the cosmic ray conference held at Duke University and cosponsored by the National Science Foundation. Galaxies in outer space, stars in our solar system, and our sun are believed to be the three sources.

Plastic pipe evaluation methods are the subject of an engineering research program recently established at Battelle Memorial Institute by 29 companies of the Society of the Plastics Industry, Inc. The program aims to develop effective methods of testing such factors as bursting strength, safe working pressures, and serviceability of plastic pipes.

Blood samples of a young calf will indicate whether it will gain weight well, moderately, or poorly in the feed lot. The test was developed through research by scientists at Texas A&M College. The research also indicates that rate-of-gain potential of a breeding animal is inherited by its offspring—a fact that may save thousands of dollars on breeding stock, according to the scientists at the college.

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# The Eisenhower Plan

In 1775, at Concord, Mass., a handful of American colonists "fired the shot heard 'round the world." The shot altered the course of history. At that stage of human affairs, man's liberty was at stake. It could be saved only by forceful resistance to tyrannical government.

Last week, at the United Nations in New York, President Eisenhower made a declaration on the problem of atomic war that also was heard 'round the world. This speech may alter the course of history as decisively as the shot at Concord. Today, atomic weapons have put man's very existence at stake. Perhaps it can only be saved by what Eisenhower offered the world—a way out of the atomic deadlock.

The U. N. speech was a serious and honest attempt, as Walter Lippman puts it, "to bring the dread subject of atomic warfare within the range of serious discussion." It was so interpreted by the U. N. delegates and by popular opinion everywhere in the free world. Apparently, Moscow is taking it seriously, also.

A complete deadlock has gripped the whole subject of atomic control since the U. S. first proposed the Baruch Plan in 1946. From that time the U. S. has maintained that there must be an effective system of international control before we would consider atomic disarmament. The Russians, with equal firmness and considerably more vehemence, have argued that the A-bomb must be outlawed as a weapon of war before they would discuss control.

Now Eisenhower has suggested an entirely fresh approach. He has committed the U. S. to do two very significant things:

- Talk privately with the Russians about the whole question of atomic control.
- Contribute a small but gradually increasing proportion of its fissionable materials to an international agency under the wing of the U. N. This agency would set up a fissionable bank, draw on it to develop industrial uses of atomic energy, especially for power-short countries.

In effect, the President is now saying: There is no use pretending that the atomic race can be ended today. But let's reduce the tension on the atomic front and do it in such a way that at least a small proportion of the world's atomic resources can be used immediately for constructive purposes. Then, by gradual steps, it may be possible to halt the atomic armaments race itself.

In his U. N. speech, Eisenhower also indicated that the U. S. wants to reduce tensions on another level. It is prepared to negotiate the explosive territorial issues of Germany, Korea, and Indo-China. For, clearly, some agreement must be reached between East and West on these issues, as well as on atomic control, if the threat of an atomic holocaust is not to hang over our heads daily a few years from now.

On atomic control, though, Eisenhower took up a strategic position from which we can operate whether or not the Russians agree to go along with our proposals.

For just as the U. S. launched the Marshall Plan without Moscow and its satellites, so it can launch the Eisenhower Plan for an international atomic agency.

Thus it seems clear that the U. S. should push ahead with the atomic agency plan—though not without first allowing Moscow time to consider its position and time, if it chooses, to discuss the whole question with the U. S. privately. Then, Congress should give the President the authority to proceed with his plan.

As we see it, this is the only prudent course for the United States to take at this point in world history. If the Russians refuse to go along, this course would at the least sustain our leadership of the free world. At best, it could lead toward atomic disarmament and provide an affirmative answer to the "fearful question" that Churchill posed the other day when he asked if man's problems in the atomic age have got "beyond our control."

## Investigating Industry

Sen. Joseph R. McCarthy's investigations of Communist infiltration have led him to inquire about personnel and management policies in plants of the General Electric Co. Up to this point he has concerned himself with Communists in government and in education.

This is his first move into industry.

Although we have seen fit in the past to disagree with Sen. McCarthy, we have never challenged the right of the legislative branch of the government to explore the ramifications of the Communist problem as a preliminary to legislating. Nor would it make sense to curtail a line of investigation at a plant gate if a trail of espionage or sabotage led in that direction.

After Sen. McCarthy's GE hearings the company announced that it will "discharge from its employ all admitted Communists, spies, and saboteurs and will suspend employees who refuse to testify under oath on such matters when queried in public hearings conducted by competent government authority." The Senator has expressed himself as being satisfied by this policy statement.

But there remains another question. How will private industry operate a loyalty program while preserving staff and employee morale? It should not be impossible. Yet in the wake of congressional investigations, college faculties are split down the middle; the international information program of the U. S. was demoralized; and according to Walter Millis, the able editorial writer for the New York Herald Tribune, our vital radar laboratories at Ft. Monmouth are in a state equivalent to what would happen after "driving a Patton M-47 tank through the heart of an electronic thinking machine on the unfounded suspicion that some of its electronic tubes might have been made in Russia."

It is this kind of effect from which our industry must be secure. If private enterprise is getting into the loyalty investigation field it will have to be more skillful and intelligent than public institutions and public employment have been lest the effects be destructive.



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Henry David  
on individuality

**T**horeau

*Why should we be in such desperate haste to succeed, and in such desperate enterprises? If a man does not keep pace with his companions, perhaps it is because he hears a different drummer.*

*Let him step to the music which he hears, however measured or far away*

Artist: Hazard Dufree

(Walden, Chap. XVIII, Conclusion)

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